DOCUMENT RESUME

ED 481 098 TM 035 335

AUTHOR	Lin, Tsui-Ying; Miller, Stephen K.
TITLE	Special Education Teachers' Perceptions of Special Education Issues in Central Taiwan Elementary Schools.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
PUB DATE	2003-09-00
NOTE	96p.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	Elementary Education; Foreign Countries; Related Services (Special Education); Special Education; *Special Education Teachers; *Teacher Attitudes
IDENTIFIERS	*Taiwan

ABSTRACT

This study examined the perceptions of special education teachers of special education in central Taiwan. Responses to a questionnaire were received from 176 teachers in central Taiwan, representing about 20% of the special education teachers in the central area. The 29 questionnaire items were grouped into 7 topics. Taiwanese elementary school special education teachers were generally in agreement that special education students need more help for their problems. They were generally positive about placement alternatives for special education students, although they were somewhat negative about the use of IQ scores and the actual effects of placement for students. They had somewhat favorable opinions about schools' capabilities for accommodating special education programs, but were split in their views of the quality of training for special needs students, and essentially neutral about their own roles in student placement, collaboration among different professionals in the field, and support groups working in special education. The study also reveals the lack of research about special education in Taiwan. Appendixes contain the English and Mandarin Chinese translations of the cover letter and survey instrument. (Contains 30 tables and 53 references.) (SLD)

SPECIAL EDUCATION TEACHERS' PERCEPTIONS OF SPECIAL EDUCATION ISSUES IN CENTRAL TAIWAN ELEMENTARY SCHOOLS

TSUI-YING LIN

CHUNG-SHAN MEDICAL UNIVERSITY (TAIWAN)

and

STEPHEN K. MILLER

UNIVERSITY OF LOUISVILLE

UNPUBLISHED TECHNICAL PAPER, SEPTEMBER, 2003

Address correspondence to:
Dr. Stephen K. Miller
Dept. of Leadership, Foundations
and Human Resource Education
University of Louisville
Louisville, KY 40292
(502) 852-0637
Steve.Miller@Louisville.edu

Statement of the Problem

Following the passage of PL 94-142, the Education for All Handicapped Children Act in 1975, the ideal of the least restrictive environment has become the dominant position with respect to placement. Accordingly federal, state, regional, and local education agencies developed new policies for funding services, appropriate for placement of students with special needs. The changing beliefs about deviant behavior and the purpose of schooling for individuals with exceptional problems, the role of the school in the community, legislation, and litigation all influence school districts' policies and decision making for educational placements of these students.

Leone and McLaughlin (1995) note that one group affected is students with emotional and behavioral disorders (EBD) who need special education and related services. Under PL 94-142, these students receive educational service in a variety of settings: regular classroom, resource rooms, separate classes, separate public day schools, separate private day schools, public residential facilities, private residential facilities, correctional facilities, and homebound or hospital-based instrument (Stephens & Lakin, 1995). With the least restrictive environment, the physical location of EBD classes has become a contentious issue in the latter part of the 20th century (Kauffman, Lloyd, Hallahan, & Astuto, 1995).

Lloyd, Martin, and Kauffman (1995) reported which educators should be included on a team to make placement decisions about these EBD students. The regular education teacher, special education teachers, psychologist, and administrators--four professionals and a parent to be the fifth member of the team--were to participate in placement team decisions. Regarding teachers' participation in placement decisions, Lloyd et al. found that the special education teachers were present at all of the conferences while the regular classroom teacher was present at about 25% of the meetings. They also said that "only 6 of the 47 meetings were in compliance

with rules and regulations regarding participants" (p. 174). Finally, what factors affect teachers' influence on placement decisions? The authors noted that teachers reported a lack of knowledge about placement options and overloaded schedules as barriers to participation.

Delimitation of the Topic

In the United States, extensive research has been conducted on special education for students with emotional and behavioral problems. However, Martin, Lloyd, Kauffman, and Coyne (1995) found that teachers' perceptions of the educational placement process for these students had generally been neglected and ignored in both research and policy making. They collected qualitative data to examine barriers to optimum placement from the teachers' perceptive, arguing that teachers' views of educational placement are different from the views of the principals, counselors, and parents and that teachers' perceptions and value judgments influence the placement decision.

In Taiwan, special education, both practice and research, lags considerably behind the U.S. Although special education is now similar to American PL 94-142, it was not until 1984 that this policy went into effect. Practitioners of special education willingly accepted the mandates of Taiwan's special educational regulations, and have made significant progress in the education of children and youth with different special needs since that time. But the reality is that, just as previously in the U.S., alterations in practice, and a research base to understand and track those changes, take years to develop.

Thus, in Taiwan there is also the same problem that Martin et al. (1995) refer to in the U.S., i.e., there is a lack of knowledge about teachers' perceptions of educational placement decisions for emotionally and behaviorally troubled students. However, due to the general lag in research in Taiwan as compared to the U.S., there is a lack of knowledge about teachers' perceptions of educational placement decisions generally, for all types of students, not just

limited to EBD cases. In addition, in Taiwan there is virtually no research on teachers' perceptions of special education generally.

Accordingly, this research replicates the Martin et al. (1995) study in Taiwan, but expands the breadth of topics covered. Specifically investigated are educational placement decisions for all special education categories in Taiwan elementary schools. In addition the survey includes a number of other issues on special education generally: the well being of special needs children, various types of resources, cooperation and support, and teachers' personal efficacy. Thus, the central research question becomes, What are special education teachers' perceptions of special education in central Taiwan elementary schools?

Policy Definition

"Policy" is a term that is has many meanings. The term is ambiguous as it brings to mind many definitions that would fit based on the experience of the person making the definition. According to Guba (1984), there are eight different definitions of policy, including "goals or intentions, standing decisions, guide to discretionary action, problem-solving strategy, sanctioned behavior, norms of conduct, output of the policy-making system, constructions based on experience" (p. 65). Leone and McLaughlin (1995) said that "policies guide agency or school actions" (p. 336). They also note that school districts' policies concerning students with emotional or behavioral disorders were shaped by the Individuals with Disabilities Education Act (IDEA) in 1990, the re-authorization of PL 94-142.

Under the IDEA and section 504 of the Rehabilitation Act (1973), behavioral disorders required legal placement (Bateman & Chard, 1995). In effect, IDEA and section 504 provide overall intentions or goals for these special needs students, consistent with Guba's (1984) first definition. Also, consistent with Guba's definition 2, IDEA and the 504 rules "govern the decisions regularly made in implementing PL 94-142" (Guba, p. 66). Further, consistent with

Guba's definition 8, IDEA and 504 include references to "the clients [describing] the policy emanating from PL 94-142 as a result of their experiences with it" (Guba, p. 69).

The current study is framed by Guba's (1984) definition 5, What expectations should be set for implementers of PL 94-142, including role perceptions, definitions and the corresponding behaviors of role incumbents and their counterparts (p. 68). Special education teachers by law are supposed to play an important role in implementation of PL 94-142. Because so little is known about these teachers' actual practice and views on a variety of special education topics, it is difficult for policymakers to make research-informed decisions regarding allocation of resources, staff development, and modification of policy. Accordingly, this study describes elementary special education teachers' perceptions (e.g., role, function) of the implementation of special education in Taiwan.

Political Influence

In the last fourteen years Taiwan's economy has made considerable progress. But special education was generally neglected. Because of a lack of finances, exceptional children did not obtain appropriate placement. Even though the new special education act was passed in 1984, political factors impeded implementation. Taiwan's political strategy focused on economic development, precluding attention for special needs children. Thus, the ratio of teachers to students, as well as the number of classrooms, was too small because the finance of schools was controlled by national policies and priorities.

In America Lewis, Chard, and Scott (1994) proposed that once a child is identified as having a disability, districts are obligated to follow regulations under the IDEA and 504 of the Rehabilitation Act. In order to comply with federal law, placement decisions must include individualized plans, alternative placements, the least restrictive environment, and the provision of an appropriate education program (p. 279). Level systems are a common tool used to manage

disability. According to Scheuermann, Webber, Partin, and Knies (1994), an individualized level system contains three phases: phase I, curriculum including behaviors to be taught, criterion levels for target behaviors, and sequence of target behavior; phase II, systematic behavioral management including organization of target behaviors within the legal system, reinforcers for teaching target behaviors, organization of reinforcers within the level system, and advancement criteria; phase III, behaviors to be reduced including identification of target behaviors and behavior reduction techniques. Scheuermann et al. argued that level systems as they are currently designed and implemented may fail to individualize the program because they denied students access to the least restrictive environment and adequate curricular goals and strategies.

In contrast, in Taiwan, as noted above, political and economic priorities slowed the passage of special education regulations. The type of research conducted by Lewis et al. (1994) is only beginning to be conducted. Recently, however, Taiwanese special students' parents have become more knowledgeable of their rights regarding special education. Even without a strong research base, public views of the necessity of special education services have become more pronounced. In large part, this occurs because public opinion in Taiwan is influenced by events internationally, particularly in the United States. This is particularly true in education as many of the leading educators and policy makers in Taiwan, in both the Ministry of Education and in the universities, have been educated in the U.S. The result is a gradual increase in both special education implementation and public awareness of special education needs issues. One result of this knowledge has been parents becoming more outspoken and starting to pressure for action. In turn the pressure has led to more widely implemented special education than before.

Research Questions

Trent and Artiles (1995) have noted, along with many advocacy groups, that many minority and poor children in the U.S. were placed disproportionately into programs for children

with mental retardation. In Taiwan, there is a somewhat parallel situation.

Being labeled as a special needs child in Taiwan is often considered to be a stigma for the family. Thus low status children may be more likely to be identified and placed in special education programs. If confirmed, this trend would suggest that the identification of behavior disordered students for special placement involves a number of procedural problems. Although Taiwan's special educational regulations attempt to make the procedure as comprehensive and objective as possible, most of Taiwan's special educational regulation is so nonspecific that decisions about instruments are left up to assessment personnel. To date, professionals have been unable to rectify a number of difficulties with instrumentation and the team decision-making process (Lin, Wu, Tseng, & Lin, 1998).

This study focuses on Guba's (1984) definition 5, implementation of policy by the classroom teachers, in order to find out what Taiwanese special educators actually think about the placement process and other more general issues. The policy question for Guba's definition 5 is, "What expectations should be set for implementers of PL 94-142, either as a priori prescriptions or as modified through experience" (p. 68). Within the parameters of and specific to this larger policy question, the following research questions are explored.

How do Taiwan elementary special education teachers perceive:

1. General attitudes about special education?
2. Placement alternatives and procedures for special education programs?
3. Schools' capabilities for accommodating special education programs?
4. Training available for working with special education students:
   a. Special education personnel?
   b. Regular teachers?
5. Personal control over placement decisions?

6. Collaboration among different groups working in special education?

7. Support among different groups working in special education?

In addition to these perceptions, the following questions also apply:

8. How are the perceptions above related?

9. How do demographic factors affect the perceptions noted above?

Review of the Literature

Special Education in Taiwan

According to Regulation 300.344 of the federal Individuals with Disabilities Education Act (IDEA), teachers must be members of teams that must be represented at the individualized education program (IEP) meeting. But there are many meetings where participants were not in compliance with rules and regulations, because teachers were not permitted to participate in placement decisions (Martin et al., 1995).

Taiwan's special educational regulations mirror to a large extent the American PL 94-142. By law, the classroom teachers, parents, special education teachers, and administrators should be involved in recommendations and allowed to participate in the placement decision. Thus, in many respects, special education in Taiwan follows implementation and practice in the U.S. However, because the primary special education act for Taiwan was not passed until 1984, practice and implementation in Taiwan are not as well developed as that in the U.S. The same can be said about the state of the art for research on special education in Taiwan. In fact, the existing research base for Taiwanese special education is nascent at best with few studies comparable to issues that have been examined extensively in the U.S.

Policymakers and educators in Taiwan are therefore forced to rely mainly on personal experience, speculation, and anecdotes or assume that Taiwan parallels the U.S. Neither option is likely to provide a valid foundation for improving policy and practice in Taiwan, even though the

number of schools and children participating in special education programs in Taiwan is increasing (Wu, Han, Lin, & Lin, 1998).

Screening and Referral

Screening and referral is part of the placement process for exceptional children. The regular classroom teacher's duties include behavior observations and behavior recording in the classroom. The regular classroom teacher should communicate with parents concerning exceptional children. If the parents agree with the teacher's suggestion, the teacher should propose the referral of the student. Shea and Bauer (1987) noted that the school referral process includes having the classroom teacher complete a rating scale or checklist and inviting the parents for a conference (pp. 50-51).

Diagnostic Evaluation

Shea and Bauer (1987) indicate that "the purpose of diagnostic evaluation is to determine if the child or youth has a behavioral and/or learning problem; to determine the nature of the problem and to study the problem from a multidisciplinary perspective" (p. 55). In Taiwan, Chang (1995) explained that "handicapped evaluation results in a diagnosis of handicapped if the student's situation meets the criteria of special educational regulations. A student who meets the criteria is called a special education pupil. By law, the special education pupil has the right to receive special education" (p. 1). Beyond this general guideline, specific studies of the actual diagnostic process remain to be conducted in Taiwan.

Placement

Shea and Bauer (1987) note that a placement decision for an exceptional child is made by the child's parents and school staff. During the meeting, the interdisciplinary members determine "if the available diagnostic evaluation data [meet] the criteria for a diagnosis of behavioral disorders or other exceptionality. If eligibility is confirmed, the committee writes educational

goals and objectives, determines the service needs, and recommends an appropriate placement for the child" (p. 57).

In Taiwan a placement decision for an exceptional child is also made by the child's parents and school personnel. Chang (1995) indicates that during the team meeting, the members determine whether the child's diagnostic evaluation data meet the criteria for a diagnosis of exceptionality or not. If eligibility is confirmed, the team members do not write educational goals and objectives to determine the service need. Team members only recommend a placement for the child. Thus the goals and the Individualized Education Plan (IEP) do not get done. This void suggests more study on how regular and special education teachers cope with a legal mandate that provides little specific guidance in practice. Absent specific guidelines, there is likely substantial variation in actual implementation. More studies need to be conducted in Taiwan to determine the links between actual practice and legal requirements following placement decisions.

Determinants of Placement Outcomes

In the United States, a number of studies have been conducted that examine factors that affect outcomes for special needs students. Glassberg (1994) proposed that younger and brighter students with behavioral disorders tended to be mainstreamed and older students with behavioral disorders tended to be placed in more restrictive settings (p. 181). Kauffman, Cullinan, and Epstein (1987) said that seriously emotionally disturbed students with higher IQs tended to be placed more often in mainstream settings. But Schneider and Leroux (1994) reported that in promoting academic achievement, special programs appeared to be more effective than regular classes. Comparisons among special education programs were uncertain. Clearly, less restrictive settings result in better gains in children's self-concept (p. 200). Regarding on-task behavior, there were two comparisons between resource rooms and regular classes that showed resource

rooms were more effective. In managing off-task behavior, the special school setting was more effective than special classes. According to follow-up results, "there is considerable variation among locations in terms of the proportion of enrollees who were successfully reintegrated into regular school programs several years after discharge from special classes or schools for children with behavioral disorders" (Schneider & Leroux, p. 200).

Prieto and Zucker (1981) noted the effects of race on teachers' judgment regarding special class placement. The subjects (teachers) were randomly assigned to two groups. Group one received a case study describing a white student, and Group two received a case study describing a Mexican-American student. Subjects were told the purpose of this activity was to gather information regarding teachers' judgments about student performance based on case study information. According to the data analysis, the finding of this study indicated that "Mexico-American children are at a disadvantage relevant to likelihood of placement in special education when compared to their white counterparts" (p. 36).

Sydney and Minner (1983) said that "the criteria for placement in a program for the behaviorally disordered [were] more subjective than criteria used in other types of special classes" (p. 43). They also said that a student's demographic characteristics could be an important factor to determine a student's eligibility for special class placement.
They found that teachers are more likely to refer special class placement for a child who has a handicapped sibling than for a child who has non-handicapped siblings.

Carlson and Stephens (1986) used the Social Behavior Assessment Scale (SBA), a checklist of 134 behaviors, to identify behavioral disorders in children. According to the study results, they proposed that Mexican-American students had higher scores on the SBA. A high score on the SBA indicates a higher probability of being identified as behaviorally disordered. This study supported Prieto and Zucker's (1981) conclusion that race affects teachers' judgments

regarding special class placement.

In Taiwan, studies that examine the results of placement decisions have yet to be conducted. Because Taiwan is a fairly homogeneous society, it is likely that the race/ethnicity variables in many of the U.S. studies are not applicable. On the other hand, race is only one dimension of stratification. Social class is just as relevant as race in the U.S. but more important in Taiwan because it is the primary determinant of position in the stratification hierarchy. Yet studies on the effects of social class status on special education practice in Taiwan are only beginning to be conducted (see Lin, 2002).

Placement Decisions in Taiwan

Few studies have addressed the special education placement process in Taiwan. Early work by Liou (1983) indicated that special education practices extended to the regular classroom would help mild mentally retarded children adapt to a wider variety of environments. Hung (1998) examined students with EBD diagnoses and found them assigned to resource rooms or special facilities. Hung recommended a continuum of services to meet the needs of EBD students with differing degrees of need. The most extensive work on placement was conducted by Chang (1995) who indicated that half of special education students stayed in the regular classroom, not obtaining appropriate placements. Her recommendations to improve these conditions included:

1. Establishing special education policy for students with special needs.
2. Establishing responsible institutional regulations, including staff and finance.
3. Training the professions to become familiar with educational tests and measurement.

(p. 1)

Summary

In the United States, PL 94-142, passed in 1975, has produced a revolution in how special needs children are perceived and educated. Extensive regulations have evolved defining criteria

of eligibility for various categories of need, procedures for screening and evaluating students, and rules for interdisciplinary team meetings to determine actual placement of students into programs. In fact, special education as an overall field has exploded, so much so that voluminous literatures have developed for each of the various need categories.

In contrast, in Taiwan, where special education policy was formalized in 1984, both practice and research lag far behind that in the U.S. Yet Wu et al. (1998) note that special education placements are expanding rapidly, a situation that leaves educators without firm guidance on the daily routines and decisions of identification, placement, and instructional practice.

Several specific areas of the special education process reflect this less developed state in Taiwan. For example, with respect to diagnostic evaluations, Chang (1995) offers general guidelines but there is little research on how this occurs in the schools. At the juncture of actual placement Chang indicates that the team responsible for a student often does not write the IEP and that this task is not completed. Other aspects of special education, such as screening and referral or actual placements, have received little or no empirical study.

An ongoing stream of studies in the U.S. has examined variables that affect the eventual placement decision in the area of EBD. Demographic factors clearly have a role in this regard. Age and IQ (Glassberg, 1994), severity of emotional problems (Kauffman et al., 1987), race (Carlson & Stephens, 1986; Prieto & Zucker, 1981), and having a handicapped sibling (Sydney & Minner, 1983) have all been shown to affect the process. Other studies (e.g., Schneider & Leroux, 1994) have examined the differential effects of placement along the least-restrictive-environment continuum, finding considerable variation depending on the outcome measured.

The research base on special education in Taiwan is much more general. Liou (1983) noted the need for extending special education practices into the regular classroom. Hung (1998)

indicated the need for a continuum of services to match the continuum of need. Chang (1995) suggests close to half of special education students were still in the regular classroom, not receiving appropriate placement or service. But many of these articles represent general commentary and are not based on actual empirical studies. Regarding context, the effects of demographic factors have essentially not been addressed, in large part because Taiwan has a much more homogenous population. But unlike race, socioeconomic status and rural-urban distinctions are part of the social fabric. Lin's (2002) survey of special education beliefs and practices, which also examined the influence of such demographic factors, may be the lone exception in this area.

The current study is designed to address and extend this limited research base. Specifically this survey of elementary special education teachers in Taiwan investigates their perceptions of the general quality and practice of special education programs. In addition, demographic data on these teachers are examined for influence on their perceptions.

Methodology

Type of Study

This study utilizes quantitative methodology to compare groups of related variables on appropriate statistical procedures to answer the research questions. Creswell (1994) proposes that survey design provides a quantitative description of the sample. Through the data collection, "research [can] generalize the findings from a sample of responses to a population" (1994, p. 117). Thus, in order to realize special education teachers' perceptions of educational placement in Taiwan, this study employs survey research to generalize specific characteristics and attitudes of this population based on sample statistics. According to Fowler (1993) "respondents have time to give thoughtful answers, to look up records, or to consult with others" (p. 66) when responding to a questionnaire.

Sources of Data

The population of this study is central Taiwan special education teachers, with a sample of the 176 special education teachers in Taichung prefecture. In central Taiwan there are four separate (Taichung is one) prefectures and one city (Taichung city), altogether containing 723 special education teachers. The special education teachers in Taichung prefecture elementary schools were a convenience sample because one of the researchers had access to these individuals through her father, who is the principal of a school in Taichung.

Data were collected by means of a questionnaire containing 29 items. The survey utilized a 5 point Likert scale from strongly agree to strongly disagree. The questionnaire was designed by the authors based on the categories in a study by Martin et al. (1995). A section on demographic information included questions on gender, age, education level, years of service, and special education classification. A map of survey items for respective Research Questions 1-7 and 9 is attached (see Appendix D).

Procedures

Completing the survey instrument takes approximately 10 minutes. The questionnaire and cover letter were both in English and Mandarin (see Appendices A and B). After development, the questionnaire was sent, along with the cover letter which serves as the consent form, to the University Human Studies Committee (see Appendix C).

The survey was conducted by Mr. Lin, Po-Chung (Chiao-Jen Elementary School principal at Taichung). He mailed questionnaires to the principals of the other schools, who then gave out the surveys to special education teachers. After completing the survey, the special education teachers returned it to their principals. The principals then returned all the completed surveys to Mr. Lin, Po-Chung who then mailed them to the authors at the University of Louisville for analysis.

For Research Questions 1-7, the items were grouped together to form scales on the basis of Martin et al. (1995). The different categories were checked for face validity and minimal criteria of reliability to determine if they functioned as a true scale (see Appendix D for scale items and respective research questions). Descriptive statistics were then computed. For Research Question 8, a correlation matrix was created. Finally, for Research Question 9, multiple regression was utilized to examine relationships between demographic variables and teachers' perceptions of the different categories.

Generalizability

According to LeCompte and Goetz (1982), reliability and validity of findings are crucial. Babbie (1990) notes that "reliability is a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time" (p. 132). In this study, which asks Taiwan special education teachers only questions they are likely to know, about special education topics relevant to them, the survey meets those criteria. This technique helps create reliable measures. Babbie (1998) notes that "validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration" (p. 133). In this study, both face validity and construct validity are relevant. The survey was developed to make sense to Taiwanese elementary special education teachers (face validity, based on the first author's long personal experience as a Taiwan special education teacher) and consistent with the literature on perceptions of placement decisions by special education teachers (construct validity, based on categories from Martin et al. [1995]).

According to Lecompte and Goetz (1982), most findings from survey design are generalized from the sample to population. They noted that "such generalization is warranted only where subjects have been sampled randomly from the entire population to which the findings are applied" (p. 34). Because of the adequate sample size and return rate, the results of

this survey could be generalized to the larger population of special education teachers in Taiwan. However, the sample is convenient, not random. But it is approximately a 20% sample (176 in Taichung Prefecture out of 723 in central Taiwan) and is a census of 1 of the 5 political areas in central Taiwan. Because there is no reason to believe the teachers or schools in Taichung prefecture are any different from the other three prefectures or city, and because the census of all teachers in Taichung prefecture gives adequate sample size (greater than 100) to avoid random fluctuations, then generalizing from the sample (census) of one political area to all of central Taiwan should be valid.

There are 1,904 special education teachers in northern Taiwan, 1,324 special education teachers in southern Taiwan and only 266 special education teachers in eastern Taiwan in addition to the 723 in central Taiwan. Now the question becomes, how much alike are the populations in northern, southern, and eastern Taiwan compared to central Taiwan? Central Taiwan is less urban than northern Taiwan and southern Taiwan, more urban than eastern Taiwan. Because Taipei city, the capital, is located in northern Taiwan and Kaohsiung city is a municipality directly under the central authority located in southern Taiwan, northern and southern Taiwan have larger and more urban populations than central and eastern Taiwan. However, central Taiwan does have a city and similar prefectures to those in the north and south so the three regions are not that dissimilar. Eastern Taiwan teachers would be somewhat more rural in their surroundings and schools.

Furthermore, there are three normal universities and nine normal colleges to train teachers for all of Taiwan. All special education teachers graduate from one of the twelve programs. The sample has teachers from each of the twelve programs as would also be the case for northern, southern, and eastern Taiwan. Educational doctrines and policies of the twelve programs are controlled by the Ministry of Education. Thus, the population of elementary special

education teachers is generally similar across the populations in northern, southern, eastern and central Taiwan with regard to curriculum and educational training because of the similarity of the 12 universities and colleges. While eastern Taiwan is somewhat more rural, the teachers there attend the same universities and operate under the same central Ministry of Education as do the teachers in the other three regions. It is therefore probably valid to generalize the research findings from the current sample (census) of 176 participating elementary special education teachers in Taichung prefecture to all the 4,217 elementary special education teachers in Taiwan. Future research could examine data from the four separate regions to confirm or disconfirm this claim.

Results

The survey was returned by 139 persons, all elementary special education teachers. The census of 176 teachers yielded a return rate of 79% for the population of this Central Taiwan region. The questions were answered on a five-point Likert scale from 1 (strongly agree) to 5 (strongly disagree). The results below are organized by research questions. The survey is based on Taiwan elementary special education teachers' perceptions of a range of issues about special education. Each issue or topic is represented by a separate research question. (Appendix D shows which survey items go with which research question.)

The questionnaire contained 29 perceptual items plus 10 demographic factors. First, for the questions on perceptions, missing data were found for13 separate items. However, all questionnaires returned were deemed usable; one respondent left out three items, six omitted two items, 18 surveys were missing one item. The mean value for each item was substituted for each missing value (a conservative correction) for $N = 139$ usable questionnaires for the perceptual data.

Second, for the demographic factors, it was found that there were more questionnaires

with missing data. Analysis revealed that 4 questionnaires were returned minus the demographic section; these four were thrown out, leaving $N = 135$. For the missing data on the remaining individual questionnaires for demographic items 1-10, the most common response was substituted. This decision rule is reasonable for items 1-8, and 10 since these categories all had a clearly dominant response. For grade level taught, item # 9, the responses were more evenly spread, but the same decision rule was followed for consistency.

Thus the entire database consists of $N = 135$, with any missing data replaced via the two decision rules described above. All descriptive statistics and coefficient alpha reliability tests were completed on this base of 135. From the original population of 176 elementary special education teachers in the Central Taiwan Region, this yielded a 77% return.

Because the survey items were coded on the 5-point Likert scale from 1 (strongly agree) to 5 (strong disagree), the results in effect are reverse coded (the natural number 5 is larger than 1). However, for the data pertaining only to the survey questions (all analyses below for Research Questions 1-8), the data were analyzed as they were originally recorded on the survey (1 is high, 5 is low). For Research Question 9, regarding demographic information, the survey questions had to be reverse coded so that larger numbers are positive, consistent with the data from the demographic variables.

Research Question # 1

Table 1 presents means and standard deviations for Research Question # 1, general attitudes about special education. The teachers agreed most strongly with question # 8, $M = 1.66$. The question receiving the least agreement was question # 2, with $M = 2.95$, a figure essentially neutral. The total mean and standard deviation for Research Question # 1 reflected agreement for these general issues in special education, $M = 2.39$ and $SD = 0.58$.

Table 1

Taiwan Elementary Special Education Teachers' General Attitudes Toward Special Education (N = 135)

Survey number	Question[a]	Mean	Standard deviation
2	Too many students are referred for special education.	2.95	.98
3	Some students referred for special education just need more help in the regular classroom.	2.39	1.02
8	Special education students need different treatment approaches to be successful.	1.66	.65
13	The severity of special education students' problems has increased.	2.56	.97
Total[b]	General attitudes about special education.	2.39	.58

[a]Question given in shortened form; see Appendix D for full statement of each question.

[b]Question for Total is overall topic.

Research Question # 2

Table 2 presents means and standard deviations for Research Question # 2, placement alternatives and procedures for special education programs. The teachers agreed most strongly with question # 14, $M = 2.29$. The question receiving the least agreement was question # 6 with $M = 3.31$, very slight disagreement. The overall mean and standard deviation of Research Question # 2 were $M = 2.78$ and $SD = 0.49$, reflecting slight agreement, but the overall mean is deceiving as the respondents agreed with three questions, disagreed with two, and were neutral on one.

Table 2

Mean Taiwan Elementary Special Education Teachers' Perceptions of Placement Alternatives and Procedures for Special Education Programs (N = 135)

Survey number	Question[a]	Mean	Standard deviation
1	The placement alternatives based on IEP recommendations are beneficial.	2.35	.86
5	The testing procedures for students who are referred are appropriate.	2.97	.88
6	The placement alternatives based on IQ scores are beneficial.	3.31	.97
7	Maintaining a special education structure that includes a range from inclusive to resource room.	2.53	.93
9	Most special education students get what they need.	3.24	.92
14	Sufficient placement options exist.	2.29	1.02
Total[b]	Placement alternatives and procedures for special education programs.	2.78	.49

[a]Question given in shortened from; see Appendix D for full statement of each question.

[b]Question for Total is overall topic.

Research Question # 3

For Research Question #3, schools' capabilities for accommodating special education programs, Table 3 presents means and standard deviations. The teachers agreed most strongly with question # 4, $M = 2.48$. The one question disagreed with was question #15, with $M = 3.27$ while question #10 was essentially neutral. The total mean and standard deviation for Research Question # 3 showed slight agreement: $M = 2.79$, $SD = 0.59$. These questions, however, are worded so that agreement implies schools' capabilities are not adequate to accommodate special needs issues fully. It is interesting that the question of dissent (#15) was on financial support

whereas the other questions focused on procedures and programs as problematic.

Table 3

Taiwan Elementary Special Education Teachers' Perceptions of Schools' Capabilities for Accomodating Special EducationPrograms (N = 135)

Survey number	Question	Mean	Standard deviation
4	It takes too long for students who have completed their IEP meeting to be placed.	2.48	.82
10	Schools are encountering problems that they do not have the capacity to handle.	3.05	.95
15	Special education programs are financially overburdened.	3.27	1.13
16	I am frustrated about administrative procedures as impediments to providing services.	2.61	.85
17	Schools lack available services, physical structures, or placement options.	2.79	1.03
18	Procedural "red tape" and length of process interferes with student well being.	2.52	.93
Total[b]	Schools' capabilities for accommodating special education programs.	2.79	.59

[a]Question given in shortened form; see Appendix D for full statement of each question.

[b]Question for Total is overall topic.

Research Question # 4

The means and standard deviations in Table 4 are for Research Question # 4, the training available for working with special education students: (a) Special education personnel? (b) Regular teachers? The respondents perceived that special education teachers have better preparation, question # 11, $M = 2.45$, compared to regular teachers, question # 12, $M = 3.13$. The overall mean and standard deviation for Research Question # 4 were $M = 2.79$, $SD = 0.61$.

Table 4

Taiwan Elementary Special Education Teachers' Perceptions of Special Education and Regular Teachers' Training for Working with Special Education Students (N = 135)

Survey number	Question[a]	Mean	Standard deviation
11	*Special education teachers and consultants* working with special education students have proper training.	2.45	.74
12	*Regular teachers* working with special education students have proper training.	3.13	.76
Total[b]	Special education and regular teachers' training available for working with special education students.	2.79	.61

[a]Question given in shortened form; see Appendix D for full statement of each question.

[b]Question for Total is overall topic.

Research Question # 5

Table 5 presents means and standard deviations for Research Question # 5, personal control over placement decisions. Very little variation was evident, with two of the three having essentially neutral responses, $M = 2.93$ and $M = 3.04$ for questions 19 and 20, respectively. Quesiton #20, at $M = 3.44$, suggests these special education teachers disagreed slightly that they lacked knowledge about options. The total mean and standard deviation for Research Question # 5 were $M = 3.14$, $SD = 0.78$.

Table 5

Taiwan Elementary Special Education Teachers' Personal Control over Placement Decisions (N = 135)

Survey number	Question	Mean	Standard deviation
19	I have little influence in placement decisions	2.93	1.06
20	I lack knowledge about options.	3.44	.89
21	I think that others make the decisions.	3.04	1.04
Total[a]	Teachers' personal control over placement decisions.	3.14	.78

[a]Question for Total is overall topic.

Research Question # 6

Table 6 presents mean and standard deviation for Research Question # 6, collaboration among different groups working in special education. Again, all responses were close to neutral, ranging from question # 24, $M = 2.90$, to question # 23, $M = 3.12$. The overall mean and standard deviation of Research Question # 6 were $M = 3.00$ and $SD = 0.68$.

Table 6

Taiwan Elementary Special Education Teachers' Perceptions of Collaboration among Different Groups Working in Special Education (N = 135)

Survey numbers	Question[a]	Mean	Standard deviation
22	A lack of collaboration among general and special education teachers.	3.06	.97
23	A lack of collaboration among administrators and teachers.	3.12	.90
24	A lack of collaboration among parents and teachers.	2.90	.94
25	A lack of collaboration among other agencies or professionals and the school.	2.93	.86
Total[b]	Collaboration among different groups working in special education.	3.00	.68

[a]Quesiton represents meaning of item; see Appendix D for survey construction.

[b]Question for Total is overall topic.

Research Question # 7

For the last topic, support among different groups working in special education (Research Question # 7), means and standard deviations are presented in Table 7. The actual questions are based on a perceived lack of support. However, once again, Taiwanese elementary special education teachers perceived this issue as neutral, with responses ranging from $M = 2.96$ for question # 29 to $M = 3.17$ for question # 27. The total mean and standard deviation for Research Question # 7 was $M = 3.07$, $SD = 0.73$.

Table 7

Taiwan Elementary Special Education Teachers' Perceptions of Support among Different groups Working in Special Education (N = 135)

Survey number	Question[a]	Mean	Standard deviation
26	A lack of support among general and special education teachers.	3.10	.95
27	A lack of support among administrators and teachers.	3.17	.87
28	A lack of support among parents and teachers.	3.05	.95
29	A lack of support among other agencies or professionals and the school.	2.96	.85
Total[b]	Support among different groups working in special education.	3.07	.73

[a]Question represents meaning of item; see Appendix D for survey construction.

[b]Question for Total is overall topic.

Research Question # 8

This question differs from the preceding questions, which reported the perceptions of the respondents in seven different categories. Question 8 asks about the relationship among these topics. This presumes that each of the seven represents a single dimension and that each dimension is somewhat independent of the others.

In order to determine whether the survey items in each topic actually fit together into a single dimension, the authors calculated Cronbach's (1951) coefficient alpha reliability, which represents the internal consistency of the items in each of the categories, in effect whether they "hang together" as a scale. The original seven categories were based on the authors' estimate of face validity.

Table 8 reports Cronbach's (1951) alpha for each of the seven categories. For Research Questions 3, 5, 6, and 7, Cronbach's alpha ranged from .67 (RQ3) to .82 (RQ7). Nunnally and

Bernstein (1994) suggest that an alpha of .6 or better is sufficient for exploratory research. Accordingly, each of these were treated as single composite variables. Each separate item was treated as a single variable in Research Questions 1, 2, and 4, where Cronbach's alpha was below .60. For the 3 research questions with alpha less than .6, the composite reliabilities ranged from .47 to .49.

Table 8

Reliability Characteristics for Composite Survey Topics by Research Question[a] (N = 135)

Research question	Scale mean	Standard deviation	Cronbach's alpha	Number of items
1	2.39	.58	.49	4
2	2.78	.49	.47	6
3	2.79	.59	.67	6
4	2.79	.61	.47	2
5	3.14	.78	.69	3
6	3.00	.68	.73	4
7	3.07	.73	.82	4

[a]See Appendix D for map of questionnaire items to each Research Question.

Research Question # 8 asks how the perceptions in the seven different areas are related. To answer this, the authors constructed a correlation matrix. For each of Research Questions 3, 5, 6, and 7, where the alpha reliability was greater than .6, the composite scale mean was utilized. For the remaining three research questions, where the survey items did not "scale," the separate item means were utilized. This produced a matrix with 16 variables--4 composite and 12 single survey items.

Table 9 presents the results of the Pearson Product correlation computations. In general

the correlations throughout are very low, indicating that Taiwanese special educators' perceptions of issues are not related. A few exceptions have correlations above .3 and include, for example, variable 1 (SQ2) with variable 2 (SQ3), .35; variable 3 (SQ8) with variable 12 (SQ11), .32. A total of 8 correlations in the full matrix range between .3 and .39. In addition, there were three correlations in the .4-.49 range: variable 9 (SQ9) with variable 12 (SQ11), .40; variable 11 (CAPABIL3) with variable 15 (COLLAB6), .45; and variable 12 (SQ11) with variable 16 (SUPPORT7), .44. Finally, variable 15 (COLLAB6) correlates with variable 16 (SUPPORT7) at $r = .79$. (See Appendix D for survey item variables.)

It is noteworthy that with the exception of the last correlation (COLLAB6 with SUPPORT7), there is no pattern among these higher associations. In fact, the individual survey items in these stronger correlations typically are not even from the same research question. For the .79 correlation between Research Question 6 and Research Question 7, the wording of the items was identical except for "collaboration" in RQ6 and "support" in RQ7.

Table 9

Correlation Matrix for Variables in Special Education Teachers' Survey (N = 135)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	--															
2	.35**	--														
3	.00	.23**	--													
4	.13	.25**	.16	--												
5	.17	.15	.22*	.10	--											
6	-.05	-.05	.03	-.09	.16	--										
7	-.07	-.10	.01	-.03	.09	.30**	--									
8	.19*	.19*	.21*	.14	.13	.12	.02	--								
9	.05	.06	.09	-.15	.10	.25**	.21*	.21*	--							
10	.26**	.06	.12	.08	.07	.09	.05	.15	.01	--						
11	.22*	.16	-.01	.34**	.23**	-.14	-.17*	-.09	-.04	.15	--					
12	.05	.18*	.32**	.14	.23**	.24**	.10	.28**	.40**	.15	-.09	--				
13	.17*	.02	.07	.11	.07	-.02	.02	.23**	.20*	.03	-.01	.31**	--			
14	.21*	.13	-.16	.12	-.02	-.19*	-.05	-.08	-.09	-.13	.35**	-.30**	.03	--		
15	.11	.11	-.10	.14	.09	-.15	-.15	-.15	-.19*	.03	.45**	-.08	-.06	.36**	--	
16	.13	.14	-.04	.12	.07	-.15	-.15	-.18*	-.15	-.18*	.07	.44**	-.10	-.01	.79	--

Note. Survey has 29 items, which were grouped into 7 categories, each examined as a separate research question. For Research Questions 3, 5, 6, and 7, Cronbach's alpha was ≥ .67. Each of these was treated as a composite variable (number of research question included in variable label). Each separate survey item was treated as a single variable in the remaining 3 research questions where $\alpha < .6$. This results in 16 variables; see Appendix D for actual questions as mapped to the seven research questions. Variable labels: 1 = Survey Question 2 (SQ2); 2 = SQ3; 3 = SQ8, 4 = SQ13, 5 = SQ1, 6 = SQ5, 7 = SQ6, 8 = SQ7, 9 = SQ9, 10 = SQ14. 11 = Research Question # 3 (CAPABIL3); 12 = SQ11, 13 = SQ12, 14 = Research Question # 5 (CONTROL5), 15 = Research Question # 6 (COLLAB6), 16 = Research Question # 7 (SUPPORT7).

*$p < .05$. **$p < .01$.

Research Question # 9

Research Question 9 examines the influence of demographic variables on the seven factors in Research Questions 1-7. Descriptive statistics for the 10 demographic variables are presented first in Tables 10-14. Subsequently, a series of multiple regressions present the relationship between the demographic variables and the attitudes about special education topics in Research Questions 1-7.

Descriptive Statistics

Table 10 gives number and percentages for gender, native born, and school location. There are 107 (79.3%) female special education teachers in central Taiwan. All but one special education teacher was born in Taiwan. The majority (95 or 70.4%) of special education teachers served in county schools.

Table 10

Gender, Native Born, and School Location Distributions (N = 135)

Characteristic	Number	Percent
Gender		
Male	28	20.7
Female	107	79.3
Native Born		
Native born (Taiwan)	134	99.3
Native born other than Taiwan	1	.7
School Location		
City school	35	25.9
County school	95	70.4
Parochial school	5	3.7

Table 11 presents age and years of service distributions. There are 52 (38.5%) special education teachers in the age 31-40 grouping, the highest percentage. Only 15 (11.1%) of special education teachers were above 50. For years of service, the distribution ranges from a high of 49 (36.3%) with 0-5 years to only 14 (10.4%) serving 11-15 years.

Table 11

Age and Years of Service Distributions (N = 135)

Year range	Number	Percent
Age		
Age 21-30	39	28.9
Age 31-40	52	38.5
Age 41-50	29	21.5
Age > 50	15	11.1
Years of Service		
Service 0-5	49	36.3
Service 6-10	35	25.9
Service 11-15	14	10.4
Service > 15	37	27.4

Table 12 presents distributions of marital status and number of children. There are 99 (73.3%) special education teachers married, the highest percentage. Only 1 of the special education teachers is separated or divorced. For the number of children, the distribution ranges from a high of 48 (35.6%) without child to only 19 (14.1%) with one child.

Table 12

Distributions of Marital Status and Number of Children (N = 135)

Characteristic	Number	Percent
Marital Status		
Married	99	73.3
Single	34	25.2
Separated	1	.7
Divorced	1	.7
Number of Children		
No child	48	35.6
One child	19	14.1
Two children	43	31.9
> 2 children	25	18.5

Table 13 gives number and percentages for education level. There are 97 (71.9%) special education teachers with a bachelor's degree, the highest percentage. Only 5 (3.7%) special education teachers obtained the master's level. No special education teachers hold the doctoral degree. In Taiwan, a number of older teachers hold the certification level (24.4%), which means that they have completed the equivalent of a five-year institute following middle school; this included the equivalent of three years of secondary school and a two-year post secondary program.

Table 13

Distribution of Educational Level (N = 135)

Education level	Number	Percent
Certification	33	24.4
Bachelor's degree	97	71.9
Masters	5	3.7
Doctorate	0	0

Table 14 presents distributions of teaching grade levels and special education classification. The highest number (83 or 31.1%) of special education teachers were in second grade. Only 25 (9.4%) were teaching sixth grade. However, some special education teachers serve more than one grade level so that the total in Table 14 exceeds *N* of 135. For classification, the distribution ranges from a high of 73 (25.0%) special education teachers in the mental retardation area (mild, moderate, and severe) to only 1 each (.3%) in the emotional behavioral disorders and visual impairment areas. Again, special education teachers typically hold more than one classification, particularly for working with the mentally handicapped where Mild Mental, Moderate Mental, and Severe Mental Retardation levels are considered as one

classification.

Table 14

Distributions of Teaching Grade Levels and Special Education Classification

Characteristic	Number	Percent
Teaching Grade Level		
First grade	49	18.4
Second grade	83	31.1
Third grade	46	17.2
Fourth grade	33	12.4
Fifth grade	31	11.6
Sixth grade	25	9.4
Total	267	100.0
Special Education Classification		
Emotional and Behavioral Disorders	1	0.3
Mild Mental Retardation[a]	73	25.0
Moderate Mental Retardation[a]	73	25.0
Severe Mental Retardation[a]	73	25.0
Hearing Impairment	7	2.4
Learning Disabilities	12	4.1
Gifted and Talented	9	3.1
Visual Impairment	1	0.3
Multi-Handicapped	4	1.4
Other	39	13.4
Total	292	100.0

(*table continues*)

Table 14. (*continued*)

Note. $N = 135$; totals are more than 135 because multiple categories were marked. Percentages are calculated on total categories recorded.

[a]For Special Education Classification, the categories of Mild, Moderate, and Severe Mental Retardation are combined into one classification in Taiwan. Teachers certified in that area checked all three on the survey.

Regressions

Research Question # 9 asks about the relationship between the demographic variables and the attitudes in the survey represented in Research Questions 1-7. This second part of Research Question # 9 presents the actual regressions of the demographics on the dependent variables (Research Questions 1-7).

Consistent with results of Research Question # 8, of the 7 separate research questions, only Research Questions 3, 5, 6, and 7 had alpha > .6. These 4 were treated as a single dependent variable. For Research Questions 1, 2, and 4, the separate survey items were each treated as a dependent variable. The resulting 16 dependent variables are listed in the notes for Table 9, ordered by the original research questions--four composite "scales," plus 12 single survey items from the other three research questions.

The independent variables for each of the 16 regressions were the demographic factors presented in Table 10-14. The same set of operational definitions for these demographic variables was utilized for all 16 regressions. Although Tables 10-14 contained 10 separate demographic variables, only nine were used in this study. For Native Born, only 1 of 135 was not native born, so this variable was eliminated. These operational definitions are attached at Appendix D.

All multiple regressions involved a two-step process. Step 1 utilized stepwise regression (Model 1) that contained eight of the nine remaining demographic variables. Model 2 represented the ninth factor, School Location, coded as a dummy variable. For Model 2 the regression was simultaneous with forced entry of the location dummy variables along with any of the significant predictors from Model 1. This two-step process was followed for all 16 regressions, which collectively represented the survey responses for Research Questions 1-7. (See Appendix D for codings for variable labels.)

In the results that follow, some of the regressions were non-significant. For these variables, the actual correlations between the dependent variable and each of the predictor variables are presented. The regression is presented if the overall F ratio was significant.

Research Question # 1. This question focused on general attitudes toward education (see Table 1). Because the Cronbach's alpha for the four items was less than .6, each of the survey items is treated as a separate dependent variable. Tables 15-18 present the findings for these four survey items.

Table 15 presents the correlations for each independent variable with survey Question 2 (SQ2) on referring too many students for special education. There associations are all very low, from .003 for the special educators' teaching classification to .118 for Location 2 (county schools). The stepwise regression for Model 1 was nonsignificant. Likewise, when the 2 dummy variables for school location were entered into the regression equation for Model 2, neither was significant ($F = 1.612$, $p = .203$). Thus for SQ2, none of the demographic variables were related to this item.

Table 15

Correlations between the Dependent Variable SQ2 and Predictors (N = 135)

Predictors	r
GENDER[a]	-.048
AGE	.008
MARITAL	.101
CHILDREN	-.022
EDUCATION	-.024
SERVICE	-.044
GRADE	-.085
CLASSIFY	.003
LOCATE 1	-.006
LOCATE 2	-.118

Note. SQ2 represents the statement "I think too many students are referred for special education."

[a]See Appendix D for operational definitions of variables.

Table 16 presents the correlations for SQ3 ("Some students referred for special education just need more help in the regular classroom"). Again the independent variables demonstrated essentially no relation to this item, with gender having the strongest correlation at .129. The stepwise regression for Model 1 was nonsignificant. When the 2 dummy variables were entered into the Model 2 regression, neither was significant ($F = 1.043, p = .355$).

Table 17 presents the correlations for the demographic factors and SQ8 ("Special education students need different treatment approaches to be successful"), indicating that again the regressions--both Model 1 and the 2 dummy variables in Model2--were non significant (F = .273, p = .762). As before, the correlations range from very low (Years of Service, negative) to negligible).

Table 16

Correlations between Dependent Variable SQ3 and Predictors (N = 135)

Predictors	*r*
GENDER[a]	.129
AGE	.028
MARITAL	-.031
CHILDREN	-.004
EDUCATION	.093
SERVICE	.006
GRADE	-.112
CLASSIFY	-.071
LOCATE 1	.091
LOCATE 2	-.118

Note. SQ3 represents the statement "I think that some students who are referred for special education just need more help in the regular classroom."

[a]See Appendix D for operational definitions of variables.

Table 17

Correlations between Dependent Variable SQ8 and Predictors (N = 135)

Predictors	*r*
GENDER[a]	.135
AGE	-.073
MARITAL	-.058
CHILDREN	-.094
EDUCATION	.075
SERVICE	-.151
GRADE	-.090
CLASSIFY	.044
LOCATE 1	.057
LOCATE 2	-.064

Note. SQ8 represents the statement, "I think special education students need different treatment approaches to be successful."

[a]See Appendix D for operational definition of variables.

Table 18 presents the correlations for SQ13 ("The severity of special education students' problems has increased") and the demographic variables, all of which had extremely low

associations, less than .1. The non-significant regressions for Model 1 and Model 2 reflect this lack of relationships ($F = .015, p = .985$).

Table 18

Correlations between Dependent Variable SQ13 and Predictors (N = 135)

Predictors	*r*
GENDER[a]	.030
AGE	.090
MARITAL	-.024
CHILDREN	.024
EDUCATION	-.060
SERVICE	.095
GRADE	-.057
CLASSIFY	.082
LOCATE 1	.014
LOCATE 2	-.011

Note. SQ13 represents the statement, "I think that the severity of special education students' problems has increased."

[a]See Appendix D for operational definitions of variables.

Research Question # 2. This topic addressed placement alternatives and procedures for special education programs (see Table 2). Because Cronbach's alpha for the six items was less than .6, each of the survey items is treated as a separate dependent variable.

Table 19 indicates that the stepwise regression for Model 1 was significant ($F = 4.706, p = .032$) where being married means greater agreement. However the adjusted R^2 is minimal at .027. When the 2 location dummy variables were added into the equation in Model 2, neither was significant; Marital Status remains a significant predictor, even though the overall ANOVA for Model 2 is not significant ($F = 1.696, p = .171$). Thus for SQ1 ("The placement alternatives based on IEP recommendations are beneficial"), only Marital Status among the demographic variables was related.

Table 19

Regression of the Dependent Variable SQ1 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.185	.193
R Square	.034	.037
Adjusted *R* Square	.027	.015
Standard Error	.8596	.8647

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: MARITAL[a]			
Regression	3.477	1	3.477
Residual	98.278	133	.739
Total	101.755	134	
$F = 4.706$	Significant $F = .032$		
Model 2: MARITAL, LOCATE			
Regression	3.804	3	1.268
Residual	97.951	131	.748
Total	101.755	134	
$F = 1.696$	Significant $F = .171$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.361	.143		23.460	.000
MARITAL	.363	.167	.185	2.169	.032
Model 2					
Constant	3.185	.400		7.969	.000
MARITAL	.358	.169	.182	2.122	.036
LOCATE 1	.244	.414	.123	.590	.556
LOCATE 2	.165	.397	.087	.416	.678

Note. SQ1 represents the statement, "I think that the placement alternates based on IEP recommendations are beneficial."

[a]See Appendix D for operational definitions of variables.

Table 20

Regression of the Dependent Variable SQ5 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.253	.264
R Square	.064	.070
Adjusted *R* Square	.057	.048
Standard Error	.8551	.8589

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: GENDER[a]			
Regression	6.644	1	6.644
Residual	97.242	133	.731
Total	103.886	134	
$F = 9.087$	Significant $F = .003$		
Model 2: GENDER, LOCATE			
Regression	7.238	3	2.413
Residual	96.648	131	.738
Total	103.886	134	
$F = 3.270$	Significant $F = .023$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	4.010	.334		12.021	.000
GENDER	-.547	.182	-.253	-3.014	.003
Model 2					
Constant	4.188	.505		8.289	.000
GENDER	-.549	.182	-.254	-3.011	.003
LOCATE 1	-8.629E-02	.411	-.043	-.210	.834
LOCATE 2	-.217	.394	-.113	-.550	.583

Note. SQ5 represents the statement, "I think the testing procedures for students who are referred are appropriate."

[a]See Appendix for operational definitions of variables.

Table 20 indicates that the stepwise regression for Model 1 was significant ($F = 9.087$, $p = .003$). Gender is the significant variable; the negative correlation indicates that males (coded 1) are more likely to agree with the question than females (coded 2), but with minimal effect size of

.057. Model 2 shows that only Gender is significant when adding the 2 dummy location variables into the regression equation, but location lowers the overall significance ($F = 3.270$, $p = .023$), and the effect size in Model 2 is smaller than in Model 1. Thus for SQ5 ("The testing procedures for students who are referred are appropriate"), GENDER has a weak negative effect.

Table 21 indicates that having children was significant ($F = 13.915$, $p < .001$) in the stepwise regression for Model 1. The Adjusted R^2 is 8.8%, a weak effect but the strongest among any of the Model 1 regressions. When the 2 location dummy variables were entered into the regression equation for Model 2, the overall ANOVA remains significant ($F = 6.420$, $p < .001$). In this instance, having children and both of the location dummies were significant, although for both working in city schools and in county schools (as compared to parochial, i.e., rural, schools), the relationship was negative. The Model 2 effect size was .108, the highest for the entire survey. SQ6 ("The placement alternatives based on IQ scores are beneficial") thus demonstrated an unusual relationship to location and a weak but perhaps meaningful connection to number of children.

Table 21

Regression of the Dependent Variable SQ6 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.038	.358
R Square	.095	.128
Adjusted *R* Square	.088	.108
Standard Error	.9295	.9191

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: CHILDREN[a]			
Regression	12.023	1	12.023
Residual	114.911	133	.864
Total	126.933	134	
$F = 13.915$	Significant $F < .001$		
Model 2: CHILDREN, LOCATE			
Regression	16.270	3	5.423
Residual	110.664	131	.845
Total	126.933	134	
$F = 6.420$	Significant $F < .001$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	2.079	.182		11.423	.000
CHILDREN	.261	.070	.308	3.730	.000
Model 2	2.947	.449		6.564	.000
CHILDREN	.251	.069	.296	3.613	.000
LOCATE 1	-.985	.440	-.445	-2.238	.027
LOCATE 2	-.837	.422	-.394	-1.982	.050

Note. SQ6 represents the statement "I think that the placement alternatives based on IQ scores are beneficial."

[a]See Appendix D for operational definitions of variables.

Table 22 gives the correlations for SQ7 ("I like maintaining a special education structure that includes a range from inclusive to resource room"), indicating Model 1 and Model 2 were non significant, ANOVA of $F = 1.095$, $p = .338$. The demographic predictors all have very low to negligible associations with LOCATE2 (county schools) the highest at $r = -.123$.

Table 22

Correlations between the Dependent Variable SQ7 and Predictors (N = 135)

Predictors	*r*
GENDER[a]	.005
AGE	.046
MARITAL	.110
CHILDREN	.012
EDUCATION	-.077
SERVICE	.036
GRADE	-.040
CLASSIFY	-.026
LOCATE 1	.099
LOCATE 2	-.123

Note. SQ7 represents the statement, "I like maintaining a special education structure that includes a range from inclusive to resource room."

[a]See Appendix D for operational definitions of variables.

Table 23 indicates that the stepwise regression for Model 1 was nonsignificant, but Model 2 with the location dummy variables was significant ($F = 3.885, p = .023$). Again, the relationship for city and county schools was negative, although the effect size was small at .041. The topic for SQ9 was "Most special education students get what they need."

Table 23

Regression of the Dependent Variable SQ9 on the Demographic Variables (N = 135)

	Model 2				
Multiple *R*	.236				
R Square	.056				
Adjusted *R* Square	.041				
Standard Error	.8989				
Analysis of Variance					
	Sum of Squares	*df*	Mean Square		
Regression	6.278	2	3.139		
Residual	106.656	132	.808		
Total	112.933	134			
$F = 3.885$	Significant $F = 0.23$				
Variables in the Equation					
Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Constant	3.800	.402		9.453	.000
LOCATE 1	-.971	.430	-.465	-2.260	.025
LOCATE 2	-1.126	.412	-.562	-2.731	.007

Note. SQ9 represents the statement, "I think that most special education students get what they need."

[a]See Appendix D for operational definitions of variables.

Table 24 indicates that the stepwise regression for Model 1 was significant ($F = 5.981, p = .016$) where being married means greater agreement. However the adjusted R^2 is minimal at .036. When the 2 dummy variables were entered into the regression equation for Model 2, neither was significant ($F = 2.098, p = .104$). Thus for SQ14 ("Sufficient placement options exist"), only Marital Status among the demographic variables was significantly related.

Table 24

Regression of the Dependent Variable SQ14 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.207	.214
R Square	.043	.046
Adjusted *R* Square	.036	.024
Standard Error	1.0027	1.0088

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: MARITAL[a]			
Regression	6.014	1	6.014
Residual	133.720	133	1.005
Total	139.733	134	
$F = 5.981$	Significant $F = .016$		
Model 2: MARITAL, LOCATE			
Regression	6.407	3	2.136
Residual	133.326	131	1.018
Total	139.733	134	
$F = 2.098$	Significant $F = .104$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.361	.167		20.112	.000
MARITAL	.477	.195	.207	2.446	.016
Model 2					
Constant	3.117	.466		6.685	.000
MARITAL	.471	.197	.205	2.395	.018
LOCATE 1	.218	.483	.094	.452	.652
LOCATE 2	.272	.464	.122	.587	.558

Note. SQ14 represents the statement, "I think that sufficient placement options exist."

[a] See Appendix D for operational definitions of variables.

Research Question # 3. The topic for this question is schools' capabilities for accommodating special education programs (see Table 3). Because the Cronbach's alpha for the six items is .67, the survey items are treated as a single composite variable.

Table 25 indicates that the stepwise regression for Model 1 was significant ($F = 4.708$, p

= .032). Grade Level Taught is the significant variable; the negative beta indicates that teachers who service fewer different grade levels agree more strongly, but with minimal effect size of .027. When the 2 dummy variables were entered into the regression equation, the Model 2 regression is nonsignificant ($F = 1.610$, $p = .190$). Thus for schools' capabilities for accommodating special education programs (6 separate items), the composite scale (CAPABIL3) had a weak, negative relationship to Grade Level Taught. But the questions for this topic are negatively worded. Agreement means that the schools lack capability to accommodate special education programs adequately. Thus, in this case the special education teachers who serve fewer grade levels are slightly *more* concerned about problems and procedures for programmatic adequacy than those who serve more grade levels.

Table 25

Regression of the Dependent Variable CAPABIL3 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.185	.189
R Square	.034	.036
Adjusted *R* Square	.027	.013
Standard Error	.5747	.5786

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: GRADE[a]			
Regression	1.555	1	1.555
Residual	43.924	133	.330
Total	45.479	134	
$F = 4.708$	Significant $F = .032$		
Model 2: GRADE, LOCATE 1, LOCATE 2			
Regression	1.617	3	.539
Residual	43.862	131	.335
Total	45.479	134	
$F = 1.610$	Significant $F = .190$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.345	.082		40.831	.000
GRADE	-7.164E-02	.033	-.185	-2.170	.032
Model 2					
Constant	3.256	.280		11.615	.000
GRADE	-6.959E-02	.034	-.180	-2.065	.041
LOCATE 1	.111	.280	.084	.398	.692
LOCATE 2	7.935E-02	.269	.062	.295	.768

Note. CAPABIL3 represents Research Question # 3, Schools' capabilities for accommodating special education programs. See Appendix D for survey questions for this topic.

[a]See Appendix D for operational definition of variables.

Research Question # 4. This topic investigated teachers' training available for working with special education students (see Table 4). Because the Cronbach's alpha for the two items was less than .6, each of the survey items is treated as a separate dependent variable.

Table 26

Correlations between the Dependent Variable SQ11 and Predictors (N = 135)

Predictors	*r*
GENDER[a]	-.041
AGE	-.073
MARITAL	-.029
CHILDREN	-.041
EDUCATION	-.034
SERVICE	.013
GRADE	.071
CLASSIFY	-.020
LOCATE 1	.065
LOCATE 2	-.134

Note. SQ11 represents the statement, "I think that *special education teachers and consultants* working with special education students have proper training."

[a]See Appendix D for operational definitions of variables.

None of the variables from the stepwise regression were significant for Model 1, nor was Model 2 with the location dummy variables entered ($F = 2.557, p = .081$). Thus Table 26 gives instead the correlations for SQ11 ("*Special education teachers and consultants* working with special education students have proper training") and the demographic predictors, ranging very low to essentially random. Location 2 (county schools) was the strongest at $r = -.134$.

For SQ12, Table 27 indicates that the stepwise regression for Model 1 was significant ($F = 5.092, p = .026$). Children is the significant variable, coded as an ordinal variable with more children being high. The negative correlation means that having fewer children produces greater agreement with the statement that regular education teachers are adequately trained, but with minimal effect size of .030. When the 2 dummy variables were entered into the regression equation for Model 2, the overall significance increases, one of the few instances among the entire set of regressions in which the location dummy variables add to the Adjusted R^2, but still a small effect size of .064. For this ANOVA ($F = 4.052, p = .009$), having children and both of the

location dummies were significant but in the negative direction. Again both city and county teachers were less likely to agree compared to the parochial (rural) teachers. Thus SQ12 ("I think *regular teachers* working with special education students have proper training") is negatively related for both number of children and school location.

Table 27

Regression of the Dependent Variable SQ12 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.192	.291
R Square	.037	.085
Adjusted *R* Square	.030	.064
Standard Error	.7460	.7327

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: CHILDREN			
Regression	2.834	1	2.175
Residual	74.025	133	.537
Total	76.859	134	
$F = 5.092$	Significant $F = .009$		
Model 2: CHILDREN, LOCATE 1, LOCATE 2			
Regression	6.526	3	2.175
Residual	70.333	131	.537
Total	76.859	134	
$F = 4.052$	Significant $F = .009$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.170	.146		21.701	.000
CHILDREN	-.127	.056	-.192	-2.256	.026
Model 2					
Constant	3.956	.358		11.052	.000
CHILDREN	-.137	.055	-.207	-2.471	.015
LOCATE 1	-.912	.351	-.530	-2.598	.010
LOCATE 2	-.747	.336	-.452	-2.222	.028

Note. SQ12 represents the statement, "I think that *regular teacher*s working with special education students have proper training."

[a]See Appendix D for operation definitions of variable.

Research Question # 5. This question examined teachers' personal control over placement decisions (see Table 5). Because the Cronbach's alpha for the three items is .69, the survey items are treated as a single composite variable.

Table 28 presents the findings for the composite Research Question #5 (3 items) on teacher's personal control over placement decisions. This is the only regression in the entire set in which more than one of the factors was significant in the stepwise procedure prior to the forced entry of the location dummy variables. This results in three models overall. For Model 1 ($F = 4.688, p = .032$), Grade Level Taught is the significant factor, but negatively related (fewer grades taught, more agreement); however, the adjusted R^2 is minimal at .027. Both grade level and Years of Service were significant (both negatively so) in the stepwise regression for Model 2 ($F = 5.118, p = .007$), with adjusted R^2 increasing to .058. When the 2 dummy variables were entered into the regression equation for Model 3, neither is significant and the overall ANOVA drops in significance ($F = 3.031, p = .020$). Thus only the number of grades taught and years of service were significant, and both were inversely related for these special education teachers' sense of their control over placement decisions.

Table 28

Regression of the Dependent Variable CONTROL5 on the Demographic Variables (N = 135)

	Model 1	Model 2	Model 3
Multiple *R*	.185	.268	.292
R Square	.034	.072	.085
Adjusted *R* Square	.027	.058	.057
Standard Error	.7719	.7595	.7598

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: GRADE[a]			
Regression	2.793	1	2.793
Residual	79.252	133	.596
Total	82.045	134	
$F = 4.688$	Significant $F = .032$		
Model 2: GRADE, SERVICE			
Regression	5.904	2	2.952
Residual	76.141	132	.577
Total	82.045	134	
$F = 5.118$	Significant $F = .007$		
Model 3: GRADE, SERVICE, LOCATE 1, LOCATE 2			
Regression	7.000	4	1.750
Residual	75.046	130	.577
Total	82.045	134	
$F = 3.031$	Significant $F = .020$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.055	.110		27.761	.000
GRADE	-9.602E-02	.044	-.185	-2.165	.032
Model 2					
Constant	3.365	.172		19.557	.000
GRADE	-.108	.044	-.207	-2.452	.016
SERVICE	-.126	.054	-.196	-2.322	.022
Model 3					
Constant	2.922	.411		7.101	.000
GRADE	-9.736E-02	.045	-.187	-2.180	.031
SERVICE	-.114	.055	-.179	-2.092	.038
LOCATE 1	.495	.372	.278	1.331	.185
LOCATE 2	.383	.356	.224	1.075	.284

(table continues)

Table 28. (*continued*)

Note. CONTROL5 represents Research Question # 5, Teachers' personal control over Placement decisions. See Appendix D for survey questions for this topic.

[a]See Appendix D for operational definitions of variables.

Research Question # 6. The topic for this question is school collaboration among different groups working in special education (see Table 6). Cronbach's alpha for the four items is .73; accordingly a single composite variable represents the research question. Table 29 indicates that in the stepwise regression for Model 1, grade level taught was significant (F = 3.953, p = .049). However, the number of grades taught is negatively associated and the effect size is a very minimal .022. When the 2 dummy variables were entered into the regression equation, the ANOVA is nonsignificant (F = 2.176, p = .094). Thus for COLLAB6, the number of grade levels taught has minimal influence and is negatively correlated with the perceived level of collaboration among general and special education teachers in the school.

Table 29

Regression of the Dependent Variable COLLAB6 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.170	.218
R Square	.029	.047
Adjusted *R* Square	.022	.026
Standard Error	.6742	.6728

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: GRADE[a]			
Regression	1.797	1	1.797
Residual	60.460	133	.455
Total	62.257	134	
$F = 3.953$	Significant $F = .049$		
Model 2: GRADE, LOCATE 1, LOCATE 2			
Regression	2.955	3	.985
Residual	59.301	131	.453
Total	62.257	134	
$F = 2.176$	Significant $F = .094$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	3.150	.096		32.772	.000
GRADE	-7.702E-02	.039	-.170	-1.988	.049
Model 2					
Constant	2.676	.326		8.210	.000
GRADE	-6.694-02	.039	-.148	-1.709	.090
LOCATE 1	.521	.326	.336	1.599	.112
LOCATE 2	.452	.313	.304	1.448	.150

Note. COLLAB5 represents Research Question #6, collaboration among different groups working in special education. See Appendix D for survey questions for this topic.

[a]See Appendix D for operational definitions of variables.

Research Question # 7. This question investigated school support (actually lack thereof) among different groups working in special education (see Table 7). Cronbach's alpha for the four items is .82, resulting in a single composite variable. Table 30 indicates that Education Level was significant in the stepwise regression for Model 1 ($F = 4.365, p = .039$), although the adjusted R^2 is small at .024. When the 2 dummy variables were entered into the Model 2 regression equation, the ANOVA is nonsignificant ($F = 2.184, p = .093$). Thus for the composite Research Question # 7 on support among different groups working in special education, among all the demographic variables, only the educational level of special education teachers has a relationship, with minimal effect.

Table 30

Regression of the Dependent Variable SUPPORT7 on the Demographic Variables (N = 135)

	Model 1	Model 2
Multiple *R*	.178	.218
R Square	.032	.048
Adjusted *R* Square	.024	.026
Standard Error	.7204	.7199

Analysis of Variance

	Sum of Squares	*df*	Mean Square
Model 1: EDUCATION[a]			
Regression	2.265	1	2.265
Residual	69.072	133	.519
Total	71.292	134	
$F = 4.365$	Significant $F = .039$		
Model 2: EDUCATION, LOCATE 1, LOCATE 2			
Regression	3.395	3	1.132
Residual	67.897	131	.518
Total	71.292	134	
$F = 2.184$	Significant $F = .093$		

Variables in the Equation

Variable	*B*	*SE B*	Beta	*t*	Sig *t*
Model 1					
Constant	2.457	.236		10.416	.000
Education	.265	.127	.178	2.089	.039
Model 2					
Constant	2.023	.395		5.124	.000
Education	.265	.127	.178	2.090	.039
LOCATE 1	.507	.344	.306	1.473	.143
LOCATE 2	.431	.330	.271	1.305	.194

Note. SUPPORT7 represents Research Question #7, support among different groups working in special education. See Appendix D for survey questions for this topic.

[a]See Appendix D for operational definitions of variables.

Discussion

Analysis

The findings of this study cover two broad areas. First are the results for the 29-item

survey on special educational placement decisions and other topics, divided into the seven topics representing Research Questions 1-7. Second, a series of multiple regressions related demographic factors to the attitudes and perceptions of these special education teachers for the seven topics in the survey. The analysis addresses these two areas in turn.

Perceptions of Special Education

Research Questions 1-7 represent the perceptions of Taiwanese elementary special education teachers for seven issues. However, the division of the 29 survey items into the seven topics was not as clear-cut as anticipated. Research Question #8 examined the "scale" reliability of the groupings. Only Research Questions 3, 5, 6, and 7 had coefficient alpha above .6, considered adequate for exploratory research according to Nunnally and Bernstein (1994). Specific results for each topic and the actual items are given in Tables 1 – 7.

The results for these seven topics (based on a 5-point Likert scale) revealed that these Taiwanese elementary special education teachers were: (1) generally in agreement that special education students need extra help for their problems, (2) generally positive regarding placement alternatives for special education students, but somewhat negative toward use of IQ scores and the actual effects of placements for students, (3) somewhat favorable regarding schools' capabilities for accommodating special education programs, (4) split in their views of the quality of training for special needs children--positive for special education teachers, slightly negative for regular teachers, (5) essentially neutral regarding their own involvement in placement decisions, (6) neutral regarding collaboration among different professionals who work with special needs children, and (7) neutral regarding support among various groups working in special education.

These results need to be viewed in terms of the paucity of research on special education in Taiwan. Because so little actual empirical research has been conducted, these findings

generally constitute benchmarks for these topics. Previous work in Taiwan has focused on general commentary about compliance or participation rates (e.g., Wu et al., 1998), but empirical studies on a specific topic are unavailable.

From a comparative perspective, research in the United States does not provide equivalent information. A given study in the U.S. tends to be very narrow, addressing one particular special education category, stakeholder group, type of delivery system, specific problem, or a particular methodological approach. Progress for the various sub-fields comes from the accumulation of findings across many studies. The results of any given study represent a minute piece of the larger field of research. For example, the study by Martin et al. (1995), the research upon which the current study was modeled, focused upon a specific category of special needs (EBD), looked only at placement decisions, tapped the perspective of teachers, and used a particular methodology (focus groups).

But this level of detail was not warranted in Taiwan; rather than an exact replication of the Martin et al. (1995) study, a survey of general attitudes about special education issues within the context of a specific political jurisdiction constituted knowledge far more useful to Taiwanese educators and policymakers. In this study, the survey results reported here (Tables 1-7) represent Taiwanese elementary special education teachers' perceptions of seven general topics. The data often constitute the only extant research on a given issue. In that regard, the challenge is for researchers to supplement these findings with other empirical work so that special education in Taiwan can be addressed from a stronger knowledge base.

Influence of Demographic Factors

"Demography is destiny." Perhaps no statement about social class in the U.S. could evoke more controversy than the assertion that stratification-related factors determine one's place in the world. After all, immigrants by the millions came to start a new life, to have a

chance to be free, and to achieve the American Dream of economic success. America is perceived as the land of social mobility where the individual can "make it" depending on his/her hard work, ability, and success in school.

Yet the reality in the U.S. is extremes of wealth and poverty, differences in status among different ethnic/racial groups, and a school system in which these family background factors have a strong influence on student achievement, so much so that the "conventional wisdom" based on the Coleman Report (Coleman et al., 1966) and for years afterward was that "schools cannot make a difference." It is now recognized that the quality of schools does affect school success significantly, over and above the family backgrounds of the students. For example, Berliner and Biddle (1995, Chapters 2-3), addressing both research and theory, conclude unequivocally that the conventional wisdom was wrong; the school effectiveness (Levine & Lezotte, 1990) and teacher effectiveness (Brophe & Good, 1986) fields document the powerful influence of the school learning climate and instructional quality, respectively; and studies of class size (Finn, 2002) and school resources (Greenwald, Hedges, & Laine, 1996) demonstrate how much school funding can affect achievement.

Having said this, it is critical to understand the limits of these positive findings about school and teacher effects. These studies represent what *can be done* when instruction is high quality and extra resources are spent wisely. But there is *nothing* in these studies that negates the current reality of schooling in America: as most schools operate today, socio-demographic factors continue to have weak to moderate effects on individual level achievement and moderate to exceptionally strong influence at the level of the school. The continued existence of the black-white test score gap and its recent emergence as one of the most important fields of research in education certainly confirms this (see Jencks & Phillips, 1998; Ogbu, 2003). But race is by no means the only issue. In fact, in a recent study of a large urban district, seven socio-demographic

factors accounted for 91% of the variance between schools on several of the accountability measures in Kentucky's standards-based reform model (Moore, 2003), and social class related measures were by far the most prominent.

These influences are so consistent in the U.S that it is routine to examine social factors for their effects on school performance. This statement holds for special education as well. As far back as the 1970s (see the review by Suzuki & Valencia, 2001) and continuing into the 1980s (Carlson & Stephens, 1986; Prieto & Zucker, 1981), race has been critiqued as an inappropriate determinant of special education placements. Unfortunately, recent scholarship suggests this has not changed much for race (see Colarusso, 2001; Warner, Dede, Garvin, & Conway, 2002; Zhang & Katsiyannis, 2002), social class (Blair & Scott, 2002), or some combination of race, class, and gender (Coutinho, Oswald, & Best, 2002).

In contrast, Taiwan is homogeneous ethnically and does not have the extremes of poverty that are all too common in the U.S. Accordingly, these social factors are not routinely examined in Taiwan and the effects of such demographics on school performance are essentially unknown. But Taiwan does have social class distinctions, and lacking racial diversity, such differences are more important in terms of status than in the U.S. where the history of slavery and its after effects have resulted in far greater race consciousness than class consciousness (see Bell, 1989; Harris, 1964).

Thus it is worth examining studies of Taiwanese education for the influence of social factors. One recent study by Lin (2002) investigated the influence of several demographic factors on elementary special education teachers' self-perceptions of their knowledge of special education issues and their skills in applying this knowledge. Lin's results were modest at best. Of all the different areas for both knowledge and skills, only a few were statistically related to these teachers' backgrounds, and these areas had weak effects, ranging from non-significance to

a minimal 4.4 percent of the variance explained. These findings, however, are important because they represent one of the few studies of Taiwanese education to collect such information and perhaps the only study to do so in the area of special education.

The current study parallels Lin's (2002) previous work. Descriptive statistics were collected for a set of demographic characteristics of elementary special education teachers in central Taiwan. The factors were then regressed on these teachers' perceptions of seven topics in special education (as described above). In the current study, the demographic factors were more consistently related to elementary special education teachers' perceptions than in Lin (2002). Of the seven topic areas, only Research Question 2, placement alternatives and procedures for special education programs, was not significantly related to the teachers' background. However, the proportion of variance explained was low in all instances, ranging from 2.2% for Research Question #6 on collaboration among the different professionals who work with special education students to 10.8% for Survey Question 6 on whether placement alternatives based on IQ scores are beneficial.

There were 10 demographic factors in this study. Of these, only age was not significant in at least one of the multiple regressions. Three factors--gender, years of service, and level of education--were all significant in one equation. Location of school and number of different grade levels serviced were the factors (three times each) most likely to have a significant relationship to the perceptions of these special education teachers. For both factors, the direction was negative, i.e., parochial (rural) teachers and those who serviced fewer grade levels were more likely to agree with the topic measured. No overall pattern relating specific demographic characteristics to the different special education topics addressed was evident.

Demographics in Perspective

The multiple regressions for the 10 demographic factors on the seven special education

topics addressed in this study produced generally weak but consistent relationships. However, given that no overall pattern of demographic influence emerged and that the level of variance explained was very low, it could be argued that in Taiwan social and background factors apparently have little effect on educational processes. This conclusion would be consistent with the fact that Taiwan is much more homogeneous as a society than the U.S. where extremes of demographic measures are commonplace. Such a conclusion, however, would be premature.

It is the case that, in both Lin (2002) and the current study, socio-demographic factors had weak and inconsistent effects on elementary special education teachers' self-perceptions of their knowledge, their skills, or their attitudes. But this is a very limited perspective on the overall question regarding the influence of demographics on special education in Taiwan. Furthermore the two studies only address special education so that generalizations to regular education are clearly unwarranted based on this research.

What can be said is that both Lin (2002) and the current study examined only *self-perceptions* and only one stakeholder group, elementary special education teachers. Nothing can be said about the perceptions of other groups, and particularly nothing about *students'* perceptions. It is commonly accepted that teachers' self-perceptions do not reflect closely actual classroom practice or behavior. Research on the self-fulfilling prophecy (see Brophe, 1983; Good, 1987; Rosenthal, 1987, 1997) confirms that teachers are typically unaware of any unintended bias toward particular types of students. Thus the key question is not so much whether the teachers' demographic backgrounds affect their self-perceptions of special education issues, but rather, whether their unconscious reactions to their students' socio-demographic origins produce an unintended bias in their instructional behavior or in student outcomes.

The answer to that question is clearly beyond the scope of the current study. But it does point to the need for direct observational studies of teacher-student interactions, special

education placement meetings, or comparisons of special education versus regular teachers. Such studies are necessary to discern whether demographic factors are operating unwittingly. Other studies could examine the background of students for bias in placement into different categories of special education or for trends on student outcomes. While studies such as these are routine in the U.S., the most notable finding regarding the practice of special education in Taiwan is the current absence of such research.

Recommendations

The analysis above demonstrates the lack of existing empirical research on special education in Taiwan. The current study provides a baseline for elementary special education teachers' self-perceptions on seven topics in the field. Beyond this and Lin's (2002) study of self-perceptions of knowledge and skills needed for special education practice, virtually no empirical studies exist. A brief framework for addressing this void includes the following:

1. Stakeholder groups. The current study examines only the perceptions of special education teachers. Paralled studies of different groups such as administrators, regular teachers, parents, policymakers, or the general public would contribute to understanding the overall status of special education in Taiwan.

2. Levels of education. The current study taps only elementary school respondents. Middle school, high school, university, preschool--different levels are likely to yield different perceptions.

3. Topic. The set of seven topics explored in this study are clearly limited in scope compared to the possible issues that could be explored in other studies. Special education covers a wide diversity of problems and attention to the entire spectrum is needed.

4. Direct observations. Self-perceptual data are useful but clearly *not* the same as direct observation of behavior and practice in schools.

5. Secondary data. What do the existing records on special education programs reveal when the placements, grades, test scores, drop out status, etc., are compared to the demographic backgrounds of students?

6. Methodology. What differences are found when the same issue is explored from contrasting methodological assumptions or procedures?

While these six factors do not exhaust the range of needed research on special education in Taiwan, they do represent a minimal research agenda upon which policy and practice in Taiwan can be based. Expanding the research base is a first step to providing special educators in Taiwan the tools that they need to improve the quality of education for special needs students.

References

Babbie, E. (1990). *Survey research methods* (2nd ed.). Belmont, CA: Wadworth.

Babbie, E. (1998). *The practice of social research* (8th ed.). Belmont, CA: Wadsworth.

Bateman, B. D., & Chard, D. J. (1995). Legal demands and constraints on placement decisions. In J. M. Kauffman, J. W. Lloyd, D. P. Hallahan, & T. A. Astuto (Eds.), *Issues in educational placement: Students with emotional and behavioral disorders* (pp. 285-316). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bell, D. (1989). *And we are not saved: The elusive quest for racial justice.* New York: Basic Books.

Berliner, D. C., & Biddle, B. J. (1995). *The manufactured crisis: Myths, fraud, and the attack on America's public schools.* Cambridge, MA: Perseus Boooks.

Blair, C., & Scott, K. G. (2002). Proportion of LD placements associated with low socioeconomic status: Evidence for a gradient? *Journal of Special Education, 36,* 14-22.

Brophy, J. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology, 75,* 631-661.

Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Hankbook of research on teaching* (3rd ed., pp. 328-375). New York: Macmillan.

Carlson, P. E., & Stephens, T. M. (1986). Cultural bias and identification of behaviorally disordered children. *Behavioral Disorders, 11,* 191-199.

Chang, B-L. (1995). 增 班 設 校 外 之 考 量 -- 也 談 : 心 障 礙 學 生 教 育 安 置 之 問 題 [More issues to consider beyond founding more special schools/classes: Educational placement for students with special needs]. 特 教 新 知 通 訊 [Special Education Newsletter], *2*(6), 1-2.

Colarusso, R. P. (2001). A comparison of eligibility criteria and their impact on minority representation in LD programs. *Learning Disabilities Research & Practice, 16,* 1-7.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., et al. (1966). *Equality of educational opportunity.* Washington, DC: U.S. Government Printing Office.

Coutinho, M. J., Oswald, D. P., & Best, A. M. (2002). The influence of sociodemographics and gender on the disproportionate identification of minority students as having learning disabilities. *Remedial & Special Education, 23,* 49-59.

Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage Publications.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16,* 297-334.

Finn, J. D. (2002). Small classes in American schools: Research, practice, and politics. *Phi Delta Kappan, 83,* 551-560.

Fowler, F. J. (1993). *Survey research methods* (2nd ed.). Newburg Park, CA: Sage Publications.

Good, T. L. (1987). Two decades of research on teacher expectations: Findings and future directions. *Journal of Teacher Education, 38,* 32-47.

Guba, E. G. (1984). The effect of definitions of "policy" on the nature and outcomes of policy analysis. *Education Leadership, 42*(2), 63-70.

Glassberg, L. A. (1994). Students with behavioral disorders: Determinants of placement outcomes. *Behavioral Disorders, 19,* 181-191.

Greenwald, R., Hedges, L. V., & Laine, R. (1996). The effect of school resources on student achievement. *Review of Educational Research, 66,* 361-396.

Harris, M. (1964). *Patterns of race in the Americas.* New York: Walker.

Hung, L-Y. (1998). 我國嚴：情緒障礙教育之趨議－從第二屆行為異常兒童及青少年國際會出席會議心得談起. [Issues in education for students with severe emotional and behavioral disorders: Comments from attending "The second International Meeting for Childhood and Teenage Students with Behavioral Disorders"]. 特教園丁 [Special Education Gardener], *14*(1), 1-7.

Jencks, C., & Phillips, M. (1998). *The black-white test score gap.* Washington, DC: Brookings Institution Press.

Kauffman, J. M., Cullinan, D., & Epstein, M. H. (1987). Characteristics of students placed in special programs for the seriously emotionally disturbed. *Behavioral Disorders, 12,* 175-

184.

Kauffman, J. M., Lloyd, J. W., Hallahan, D. P., & Astuto, T. A. (1995). *Issues in educational placement: Sutdents with emotional and behavioral disorders.* Hillsdale, NJ: Lawrence Erlbaum Associates.

LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research, 52,* 31-60.

Leone, P. E., & McLaughlin, M. J. (1995). Appropriate placement of students with emotional or behavioral disorders: Emerging policy options. In J. M. Kauffman, J. W. Lloyd, D. P. Hallahan, & T. A. Astuto (Eds.), *Issues in educational placement*: *Students with emotional and behavioral disorders* (pp. 335-359). Hillsale, NJ: Lawrence Erlbaum Associates.

Levine, D. U., & Lezotte, L. W. (1990). *Unusually effective schools: A review and analysis of research and practice.* Madison, WI: National Center for Effective Schools Research and Development, University of Wisconsin.

Lewis, T. J., Chard, D., & Scott, T. M. (1994). Full inclusion and the education of children and youth with emotional and behavioral disorders. *Behavioral Disorders, 19,* 277-293.

Lin, T-Y. (2002). *Knowledge/skills needed by special education teachers in central Taiwan elementary schools.* Unpublished doctoral dissertation, University of Louisville.

Lin, G. B-G., Wu, S-M., Tseng, Y-T., & Lin, M-H. (1998).特殊教育評量鑑定工具調查研究 [A study on the assessment instruments of special education in Taiwan, R. O. C.].特殊教育研究學刊 [Bulletin of Special Education], *16*, 23-38.

Liou, K-S. (1983).輕度智能不足兒童的人格特質與教育安置之分析研究 [To analyze and study students with mild mental retardation personality characteristics and educational placement].國立高雄師大碩士論文 [Published master's thesis], National Kaohsiung Normal University, Taiwan.

Lloyd, J. W., Martin, K. F., & Kauffman, J. M. (1995). Teachers' participation in decisions about placement of students with emotional or behavioral disorders. In J. M. Kauffman, J. W.

Lloyd, D. P. Halahan, & T. A. Astuto (Eds.), *Issues in educational Placement: Students with emotional and behavioral disorders* (pp. 169-181). Hillsdale, NJ: Lawrence Erlbaum Associates.

Martin, K. F., Lloyd, J. W., Kauffman, J. M., & Coyne, M. (1995). Teachers' perceptions of educational placement decisions for pupils with emotional or behavioral disorders. *Behovioral Disorders, 20*, 106-117.

Moore, B. L. D. (2003). *An exploration of the influence of demographic factors on individual and aggregate student achievement measurements in the Kentucky accountability system.* Dissertation in preparation, University of Louisville.

Nunnally, J. C., & Bernstein, I. N. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill, Inc.

Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement.* Mahwah, NJ: Lawrence Erlbaum.

Prieto, A. G., & Zucker, S. H. (1981). Teacher perception of race as a factor in the placement of behaviorally disordered children. *Behavioral Disorders, 7,* 34-38

Rosenthal, R. (1987). "Pygmalion" effects: Existence, magnitude, and social importance. *Educational Researcher, 16*(9), 37-41.

Rosenthal, R. (1997, August). *Interpersonal expectancy effects: A forty year perspective.* Invited address at the annual meeting of the American Psychological Association Convention, Chicago. (ERIC Document Reproduction Service No. ED 415 460)

Scheuermann, B., Webber, J., Partin, M., & Knies, W. C. (1994). Level systems and the law: Are they compatible? *Behavioral Disorders, 19,* 205-220.

Schneider, B. H., & Leroux, J. (1994). Educational environments for the pupil with behavioral disorders: A "best evidence" synthesis. *Behavioral Disorders, 19,* 192-204

Shea, T. M., & Bauer, A. M. (1987). *Teaching children and youth with behavior disorders.* Englewood Cliffs, NJ: Prentice-Hall.

Stephens, S. A., & Lakin, K. C. (1995). Where students with emotional or behavioral disorders go to school. In J. M. Kauffman, J. W. Lloyd, D. P. Hallahan, & T. Astuto (Eds.), *Issues in educational placement: Students with emotional and behavioral disorders* (pp. 47-74).

Hillsdale, NJ: Lawrence Erlbaum Associates.

Suzuki, L. A., & Valencia, R. R. (2001). *Intelligence testing and minority students: Foundations, performance factors, and assessment issues.* Thousand Oaks, CA: SAGE Publications.

Sydney, J., & Minner, S. (1983). The influence of sibling information on the placement recommendation of special class teachers. *Behavioral Disorders, 9,* 43-45.

Trent, S. C., & Artiles, A. J. (1995). Serving culturally diverse students with emotional or behavioral disorders: Broadening current perspectives. In J. M. Kauffman, J. W. Lloyd, D. P. Hallahan, & T. A. Astuto (Eds.), *Issues in educational placement: Students with emotional and behavioral disorders* (pp. 215-249). Hillsdale, NJ: Lawrence Erlbaum Associates.

Warner, D. T., Dede, D. E., Garvan, C. W., & Conway, T. W. (2002). One size does not fit all in specific learning disability assessment across ethnic groups. *Journal of Learning Disabilities, 35,* 500-508.

Zhaug, D., & Katsiyannis, A. (2002). Minority representation in special education. *Remedial & Special Education, 23,* 180-187.

Wu, W-T., Han, F-J., Lin, C-C., & Lin, M-H. (1998). 我國特殊教育師資 培育與璀用政策之分析與調查研究 [Educating and recruiting policies of special education professionals in Taiwan].特殊教育研究學刊 [Bulletin of Special Education], *16*, 1-22.

APPENDIX A

ENGLISH AND MANDARIN

COVER LETTER TRANSLATIONS

JAN-1998

Dear Taiwan Teacher,

As a doctoral student at the University of Louisville, I am currently conducting a research project focusing on the referral process for educational placement decisions for special education pupils at the IEP meeting. Your role would involve completing a survey instrument (approximately 10 minutes) to provide information about your perceptions of educational placement decisions for IEP meetings. You would be one of approximately 176 teachers participating in the survey (from Taichung Prefecture). My father Mr. Lin, Po-Chung is the principal of Chiao-Jen Elementary School. He will mail questionnaires to the principal of your school, who will then give out the surveys to you and the other special education teachers. After completing the survey, please return it to your principal. He and the other principals will then return all the completed surveys to Mr. Lin, Po-Chung who will then mail the completed surveys to me at the University of Louisville for analysis.

I am inviting you to participate in this study. By completing the survey you are giving your consent to participate in this survey. You have the right to decline to answer any question which makes you uncomfortable. Although absolute confidentiality can never be guaranteed in any study, in this research there is no way to identify individual teachers from the surveys which will be collected as they are completed.

The results of this study will be used to determine how the referral process is interpreted and whether this is reflected in a consistent manner. To my knowledge this type of research has never been conducted in Taiwan and the results should help to improve special education services for Taiwanese children.

Thank you very much for your participation. I appreciate your assistance.

Sincerely,

TSUI-YING LIN

1998年1月

·q愛的臺灣教師：

我是美國路易威爾大學特殊教育博士班的學生,目前正做一項研究有關於"特殊兒童在IEP會議中教育安置的歸類過程".您的角色是提供在IEP會議教育安置決定的概念在這問卷中(時間大約是10分鐘),同時您將是臺中縣176位特殊班教師參與問卷調查的一員.我的父親是臺中縣僑仁國小校長.他將寄問卷調查表至貴校校長及其它學校校長,您的校長會將問卷調查表轉交給您,請您完成之後,再交還給您的校長,他和其它學校校長會將所有問卷調查表交還給林柏棕校長,林校長再將所有問卷調查表寄到路易威爾大學作研究分析.

我誠懇的邀請您來參與這項研究,當然在您做這份調查表之前,必須先徵求您的同意,您同時也有權利去拒絕回答問卷調查表中您不喜歡的問題,雖然這份調查表在任何研究中,沒有保證絕對保密,至於在這項研究,沒有任何方法可認出誰做的問卷調查表.

.這項研究結果將用來決定歸類過程的解釋,抑或反應出一致的態度,據我所知,在臺灣目前尚未有人做這項研究,而其結果將幫助改善我們臺灣特殊教育的服務品質.

最後謝謝您的參與,同時更感激您的協助.

林翠英謹上

APPENDIX B

QUESTIONNAIRE, ENGLISH AND MANDARIN TRANSLATIONS

QUESTIONNAIRE

The following are some barriers that have been reported by teachers who have participated in placement decisions. After reading each statement, circle the number which best applies to your situation.

1 = Strongly Agree (SA)

2 = Agree (A)

3 = Neither Agree Nor Disagree (N)

4 = Disagree (D)

5 = Strongly Disagree (SD)

	SA	A	N	D	SD
1. I think that the placement alternatives based on IEP recommendations are beneficial.	1	2	3	4	5
2. I think too many students are referred for special education.	1	2	3	4	5
3. I think that some children who are referred for special education just need more help in the regular classroom.	1	2	3	4	5
4. I think that it takes too long for students who have completed their IEP meeting to be placed.	1	2	3	4	5
5. I think the testing procedures for students who are referred are appropriate.	1	2	3	4	5
6. I think that the placement alternatives based on IQ scores are beneficial.	1	2	3	4	5

1 = Strongly Agree (SA)

2 = Agree (A)

3 = Neither Agree Nor Disagree (N)

4 = Disagree (D)

5 = Strongly Disagree (SD)

	SA	A	N	D	SD
7. I like maintaining a special education structure that includes a range from inclusive to resource room.	1	2	3	4	5
8. I think special education students need different treatment approaches to be successful.	1	2	3	4	5
9. I think that most special education students get what they need.	1	2	3	4	5
10. I think that schools are encountering problems that they do not have the capacity to handle.	1	2	3	4	5
11. I think that *special education teachers and consultants* working with special education students have proper training.	1	2	3	4	5
12. I think that *regular teachers* working with special education students have proper training.	1	2	3	4	5
13. I think that the severity of special education students' problems has increased.	1	2	3	4	5

1 = Strongly Agree (SA)

2 = Agree (A)

3 = Neither Agree Nor Disagree (N)

4 = Disagree (D)

5 = Strongly Disagree (SD)

	SA	A	N	D	SD
14. I think that sufficient placement options exist.	1	2	3	4	5
15. I think that special education programs are financially overburdened.	1	2	3	4	5
16. I am frustrated about administrative procedures as impediments to providing services.	1	2	3	4	5
17. I think that schools lack available services, physical structures, or placement options.	1	2	3	4	5
18. I think procedural "red tape" and length of process interferes with student well being.	1	2	3	4	5
19. I have little influence in placement decisions.	1	2	3	4	5
20. I lack knowledge about options.	1	2	3	4	5
21. I think that others make the decisions.	1	2	3	4	5
I AM FRUSTRATED ABOUT A LACK OF COLLABORATION AMONG:					
22. General and special education teachers.	1	2	3	4	5
23. Administrators and teachers.	1	2	3	4	5

1 = Strongly Agree (SA)

2 = Agree (A)

3 = Neither Agree Nor Disagree (N)

4 = Disagree (D)

5 = Strongly Disagree (SD)

	SA	A	N	D	SD
24. Parents and teachers.	1	2	3	4	5
25. Other agencies or professionals and the school.	1	2	3	4	5
I AM FRUSTRATED ABOUT A LACK OF SUPPORT AMONG:					
26. General and special education teachers.	1	2	3	4	5
27. Administrators and teachers.	1	2	3	4	5
28. Parents and teachers.	1	2	3	4	5
29. Other agencies or professionals and the schools.	1	2	3	4	5

FOR USE IN INTERPRETING YOUR RESPONSES, PLEASE CHECK THE APPROPRIATE ANSWER.

1. Indicate your gender: _____ Male _____Female
2. Age: _____21-30 _____31-40 _____41-50 _____51 and older
3. Native born background: _____Taiwan _____other (list)_____
4. Marital Status:

   _____Married _____Single _____Separated _____ Divorced _____Widow
5. Number of children: _____0 _____1 _____2 _____more than 2
6. Education level: _____Certification _____Bachelor's degree _____Masters

   _____Doctorate
7. Years of service: _____0-5 _____6-10 _____11-15 _____more than 15
8. School location: _____City _____County _____Parochial
9. Grade levels you work with (check all that apply): ___1___2___3___4___5___6
10. Special education classification:

    _____EBD (Emotional Behavioral Disorders)

    _____EMR (Mild Mental Retardation)

    _____MMR (Moderate Mental Retardation)

    _____SMR (Severe Mental Retardation)

    _____HI (Hearing Impairment)

    _____LD (Learning Disabilities)

    _____GT (Gifted and Talented)

    _____VI (Visual Impairment)

    _____MH (Multi-handicapped)

    _____Other (list)_____

問卷調查表

以下的敘述是有關教師參與學生被安置的決定所遇見的障礙,已經被紀錄並報導.請您在讀以下的陳述之後圈選乙個最適合的號碼代表您的立場.

1=非常同意 (SA)

2=同意 (A)

3=不同意也不反對 (N)

4=反對 (D)

5=非常反對 (SD)

	SA	A	N	D	SD
1. 我認為安置的選擇奠定在IEP的推薦是有利的.	1	2	3	4	5
2. 我認為有太多的學生被歸類為特殊教育的對象.	1	2	3	4	5
3. 我認為許多學生被歸類為特殊教育的對象,其實在普通班只需要多一些幫助即可.	1	2	3	4	5
4. 我認為完成IEP會議到學生被安置的過程中,花費時間過久.	1	2	3	4	5
5. 我認為對於被付託施測的學生,其測驗過程是正確的.	1	2	3	4	5
6. 我認為安置的選擇奠定在IQ分數上是有利的.	1	2	3	4	5

1=非常同意 (SA)

2=同意 (A)

3=不同意也不反對 (N)

4=反對 (D)

5=非常反對 (SD)

	SA	A	N	D	SD
7. 我喜歡維持現有特殊教育組織體系,範圍從普通班到資源班.	1	2	3	4	5
8. 我認為特殊兒童需要用不同的處遇方式較能成功.	1	2	3	4	5
9. 我認為大部分的特殊兒童都能得到所需要的安置.	1	2	3	4	5
10. 我認,為學校遭遇到問題時,沒有能力處理.	1	2	3	4	5
11. 我認,為特殊班教師及特教組長教導特殊兒童時,有正確的方法.	1	2	3	4	5
12. 我認,為普通班教師教導特殊兒童時,有正確的方法.	1	2	3	4	5
13. 我認,為特殊兒童的嚴重問題日趨增加.	1	2	3	4	5

1=非 常 同 意 (SA)

2=同 意 (A)

3=不 同 意 也 不 反 對 (N)

4=反 對 (D)

5=非 常 反 對 (SD)

	SA	A	N	D	SD
14. 我 認,為 充 足 的 安 置 選 擇 是 有真正存在.	1	2	3	4	5
15. 我 認,為 特 殊 教 育 課 程 造 成 財 務 上 的 負 擔 過 重.	1	2	3	4	5
16. 我 對 於 行 政 處 理 過程成為 提 供 服 務 的 障 礙 感 到 沮 喪.	1	2	3	4	5
17. 我 認,為 學 校 缺 乏 有 效 的 服 務,和 硬 體 的 設 備,或 安 置 的 選擇.	1	2	3	4	5
18. 我 認,為 程 序 上 的 阻 礙 及 繁 雜 的 過程影響了學生的權利.	1	2	3	4	5
19. 我 對 於 安 置 的 決 定 幾 乎 沒 有 影 響 力.	1	2	3	4	5
20. 我 對 於 安 置 的 選 擇 缺 乏 知 識 理 念.	1	2	3	4	5
21. 我 認,為 都 是 他 人 在 作 安 置 的 決 定.	1	2	3	4	5
我對於以下缺乏合作的關係感到沮喪:(22-25)					
22. 普通班及特殊班教師.	1	2	3	4	5

1=非 常 同 意 (SD)

2=同 意 (A)

3=不 同 意 也 不 反 對 (N)

4=反 對 (D)

5=非 常 反 對 (SD)

	SA	A	N	D	SD
23. 行政人員及教師.	1	2	3	4	5
24. 父母及教師.	1	2	3	4	5
25. 其它機構或專業人員及學校.	1	2	3	4	5
我對於以下缺乏支持關係感到沮喪:(26-29)					
26. 普通班及特殊斑教師.	1	2	3	4	5
27. 行政人員及教師.	1	2	3	4	5
28. 父母及教師.	1	2	3	4	5
29. 其它機構或專業人員及學校.	1	2	3	4	5

為了瞭解您的回答,請在正確的空格上打v

1. 性別:_____男 _____女
2. 年齡:_____21-30 _____31-40 _____41-50 _____51以上
3. 出生背景:_____臺灣 _____其它(請列出)_____
4. 婚姻狀況:

   _____nw 婚 _____未婚 _____分居 _____離婚

   _____鰥寡
5. 小孩的人數:_____0 _____1 _____2 _____2個以上
6. 教育程度:_____專科 _____學士 _____碩士 _____博士
7. 服務年資:_____0-5 _____6-10 _____11-15 _____15以上
8. 服務地點:_____市 _____鄉 _____偏遠地區
9. 目前教學的年級:(請作適當的勾選)

   ___1 ___2 ___3 ___4 ___5 ___6
10. 教師証類別:

    _____EBD(行為異常)

    _____EMR(輕度智能不足)

    _____MMR(中度智能不足)

    _____SMR(重度智能不足)

    _____HI(聽力障礙)

    _____LD(學習障礙)

    _____GT(資賦優異)

    _____VI(視覺障礙)

    _____MH(多重障礙)

    _____OTHER(請列出)_____

APPENDIX C

APPLICATION AND APPROVAL FROM UNIVERSITY OF LOUISVILLE

HUMAN STUDIES COMMITTEE REQUEST FOR EXEMPTION FROM

REVIEW FOR RESEARCH INVOLVING HUMAN SUBJECTS, PLUS ATTACHEMNT.

UNIVERSITY HUMAN STUDIES COMMITTEE
REQUEST FOR EXEMPTION FROM REVIEW FOR
RESEARCH INVOLVING HUMAN SUBJECTS

Federal and University regulations require research involving human subjects to be approved by the University Human Studies Committee. The only exceptions are those categories of research that are defined as exempt from review by Federal regulations (see reverse side). Investigators who believe their proposals are exempt should complete this form and send it with a copy of the proposal (including any questionnaires) and, if applicable, the consent form (prepared according to the consent form checklist) to the University Human Studies Committee office, Room 205, Abell Administration Center. Investigators will be notified in writing of the Committee determination of whether the proposal is exempt. These are federal requirements and we must abide by them or risk losing federal research support.

PLEASE NOTE THAT: (a) exemption from Committee review does not exempt studies from the usual requirements on obtaining informed consent; (b) studies involving prisoners, fetuses, pregnant women, in vitro fertilization, or mentally disabled persons do not qualify for exemption; and c) studies involving deception of subjects do not qualify for exemption from Committee review.

1. Principal Investigator: Dr. Stephen Miller
   Co-investigator(s): Tsui-Ying Lin
   Department: FOUNDATIONS OF EDUCATION
   UNIVERSITY OF LOUISVILLE
   Department(s): SPECIAL EDUCATION
   UNIVERSITY OF LOUISVILLE
2. Title of Project: SPECIAL EDUCATION TEACHERS' PERCEPTIONS OF EDUCATIONAL PLACEMENT DECISIONS AT IEP MEETINGS IN CENTRAL TAIWAN ELEMENTARY SCHOOLS.
3. Source of Support: NONE
4. Study Site(s):
   (See attachment.)
5. Brief Summary of Project:
   (See attachment.)
6. Does study involve:
   This study is based on an adaptation of research by Martin et al. (1995).
   audio- or videotaping of subjects? Yes ____ No X
   minors (persons under age 18?) Yes ____ No X
   students? Yes ____ No X
7. Describe how confidentiality will be maintained:
   Questionnaire does not identify individual teachers.
8. Will informed consent be obtained? Yes X ____ No, not required ____
   If yes, indicate method: signed consent form ____ letter to subjects X
   Other (describe):
   (See attached cover sheet.)
9. Briefly describe the nature of involvement of the human subjects (personal interview, mailed questionnaire, telephone questionnaire, observation, etc.):
   (See attachment.)
10. Section of regulations which describes the exempt category (See Categories Which are Exempt from Approval by the University Human Studies Committee as Defined by Federal Regulations). Circle applicable numbers and letters.
    (1 (a,) b) 2(a, b, c) 3(a, b, c)(i, ii) (4)(a,(b)) 5 (a, b, c, d) 6 (a, b)
11. Signatures:
    Investigator: Stephen K Miller Tsui-Ying Lin Date: 1/28/98
    Department Chair: Everett Eggleston Date: 3-27-98

1996

BEST COPY AVAILABLE

4. Central Taiwan, for the 176 special education teachers in Taichung prefecture, one of four prefectures and one city in Central Taiwan. (The survey is being translated into Mandarin.)

5. We conduct this project by questionnaire. The results of this study will be used to determine special education teachers' perceptions of the IEP meeting and referral process and how consistently this is reflected. To our knowledge this type of research has never been conducted in Taiwan.

9. There are 723 special education teachers in Central Taiwan elementary schools. There would be 176 teachers among them participating in the survey, those from Taichung Prefecture. The survey is being conducted by Lin, Po-Chung (Chiao-Jen Elementary School principal at Taichung). The teachers were a convenience sample based on those who serve in Taichung Prefecture elementary schools.

Copies of the survey and cover letter in both English and Mandarin are attached.

APPENDIX D

MAP OF QUESTIONNAIRE ITEMS TO RESEARCH QUESTIONS, WITH OPERATIONAL DEFINITIONS AND VARIABLE LABEL CODES

Appendix D

Map of Questionnaire Items to Research Questions, with Operational Definitions and Variable Label Codes

This appendix lists the survey question numbers (SQ1, SQ2, etc.) that correspond to each of the nine research questions. Individual item variable label codes are included in parentheses. The composite research question variable label code is included only for the four that had Cronbach's alpha level near .7 or above. The research questions are noted in bold.

How do Taiwan special education teachers perceive:

1. General attitudes about special education.

SQ2: I think too many students are referred for special education.

SQ3: I think that some children who are referred for special education just need more help in the regular classroom.

SQ8: I think special education students need different treatment approaches to be successful.

SQ13: I think that the severity of special education students' problems has increased.

2. Placement alternatives and procedures for special education programs.

SQ1: I think that the placement alternatives based on IEP recommendations are beneficial.

SQ5: I think the testing procedures for students who are referred are appropriate.

SQ6: I think the placement alternatives based on IQ scores are beneficial.

SQ7: I like maintaining a special education structure that includes a range from inclusive to resource room.

SQ9: I think that most special education students get what they need.

SQ14: I think that sufficient placement options exist.

1. Schools' capabilities for accommodating special education Programs. (CAPABIL3)

SQ4: I think that it takes too long for students who have completed their IEP meeting to be placed.

SQ10: I think that schools are encountering problems that they do not have the capacity to handle.

SQ15: I think that special education programs are financially overburdened.

SQ16: I am frustrated about administrative procedures as impediments to providing services.

SQ17: I think that schools lack available services, physical structures, or placement options.

SQ18: I think procedural "red tape" and length of process interferes with student well being.

4. Training available for working with special education students:

a. Special education personnel?

b. Regular Teachers?

SQ11: I think that *special education teachers and consultants* working with special education teachers have proper training.

SQ12: I think that *regular teachers* working with special education students have proper training.

5. Teachers' personal control over placement decisions. (CONTROL5)

SQ19: I have little influence in placement decisions.

SQ20: I lack knowledge about options.

SQ21: I think that others make the decisions.

6. Collaboration among different groups working in special education. (COLLAB6)

SQ22: I am frustrated about a lack of collaboration among general and special education teachers.

SQ23: I am frustrated about a lack of collaboration among administrators and teachers.

SQ24: I am frustrated about a lack of collaboration among parents and teachers.

SQ25: I am frustrated about a lack of collaboration among other agencies or professionals and the school.

7. Support among different groups working in special education. (SUPPORT7)

SQ26: I am frustrated about a lack of support among general and special education teachers.

SQ27: I am frustrated about a lack of support among administrators and teachers.

SQ28: I am frustrated about a lack of support among parents and teachers.

SQ29: I am frustrated about a lack of support among other agencies or professionals and the schools.

8. How are the perceptions above related?

This question examined the question groupings (or "scales") from questions 1-7. (See survey question items that cluster together, plus variable label codes for each separate survey item, under Research Questions 1-7, respectively, above.) For the Research Questions, only those that had a Cronbach's alpha of .67 or better for the cluster of items in each respective research question were given a separate variable name and label. Those with adequate reliability as a scale were Research Questions 3, 5, 6, & 7. The variable name and label for each of these is given at the end of the statement of the actual research question, above.

9. How do demographic factors affect the perceptions noted above?

Descriptive statistics for all demographic factors are given in Tables 10-14 in the text. Operational definitions and variable label codes follow, arranged by the tables in which factors appear.

Table 10 contains three variables: Gender, Native Born, and School Location. Gender (GENDER) is coded:

1 = male

2 = female.

For Native Born, only 1 (.7%) was not born in Taiwan; therefore this variable is not used in the regressions.

School Location (LOCATE) uses dummy codes:

Location Dummy 1 (LOCATE 1):

1 = city; 0 = county; 0 = parochial

Location Dummy 2 (LOCATE 2):

0 = city; 1 = county; 0 = parochial

This implies that for parochial (rural) schools, the coding is 0, 0, 0.

Table 11 contains two variables: Age and Years of Service. Age (AGE) is coded by range of years:

1 = 21-30

2 = 31-40

3 = 41-50

4 = 51 and older.

Years of Service (SERVICE) is coded:

1 = 0-5

2 = 6-10

3 = 11-15

4 = more than 15.

Table 12 contains two variables: Marital Status and Number of Children. For Marital Status both Separated and Divorced were marked by only one respondent. Therefore these two categories were collapsed with the category, Single. Thus Marital Status (MARITAL) is coded:

0 = single

1 = married.

Number of Children (CHILDREN) is coded:

1 = no child

2 = one child

3 = two children

4 = more than two children.

Table 13 gives Educational Level of special education teachers (EDUCATION), coded:

1 = certification

2 = bachelor's degree

3 = masters

4 = doctorate.

Table 14 contains two variables: Grade Level Taught and Special Education Classification. For Grade Level Taught (GRADE), this section of the survey instructed respondents to check all that apply of grades taught, 1-6, because special education teachers often serve more than one grade level. Coding represents the number of grade levels checked, but this procedure does not distinguish which grade level or combination of grade levels are indicated. For example, respondent 01 checks grades 2, 5--coded "2"; respondent 05 checks

grades 1, 3, 4-- coded "3".

The codings follow:

1 = One grade level taught

2 = Two grade levels taught

3 = Three grade levels taught

4 = Four grade levels taught

5 = Five grade levels taught

6 = Six grade levels taught.

For Special Education Classification (CLASSIFY) Taiwan combines the three levels of mental disability (Mild, Moderate, and Severe Mental Retardation) into one classification category. None of the other classifications are widely held; accordingly these other classifications are collapsed into a single category. Thus the coding for Special Education Classification is two levels:

0 = all other special education classifications

1 = Mild, Moderate, and Severe Mental Retardation.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

TM035335

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Special Education Teachers' Perceptions of Special Education Issues in Central Taiwan Elementary Schools

Author(s): Tsui-Ying Lin and Stephen K. Miller

Corporate Source: Department of Leadership, Foundations and Human Resource Education, University of Louisville, Louisville, KY 40292

Publication Date: Sept, 2003

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → Please

Signature: Stephen K Miller	Printed Name/Position/Title: Stephen K. Miller, Assoc. Prof.
Organization/Address: as above, for Corporate Source	Telephone: (502) 852-0637 FAX: (502) 852-4563
	E-Mail Address: steve.miller@louisville.edu Date: 10/28/03

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION
UNIVERSITY OF MARYLAND
1129 SHRIVER LAB
COLLEGE PARK, MD 20742-5701
ATTN: ACQUISITIONS

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com